EMERGENCY WATERSHED PROTECTION (EWP) PROGRAM

Emergency Recovery Plan

January, 2002

The Natural Resources Conservation Service (NRCS) provides EWP assistance to address threats to life and property which occur when a natural disaster causes a sudden impairment within a watershed. This may include natural disasters such as hurricanes, tornadoes, fires, drought, and floods.

This emergency recovery plan provides guidelines that address the recovery actions and inter-agency coordination that the Virginia NRCS will follow when an emergency is declared and the Emergency Watershed Protection Program is initiated and/or implemented.

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NOTE: Italics denote proposed policy changes.

Introduction

This document serves two purposes: (1) to briefly describe the Natural Resources Conservation Service (NRCS) Emergency Watershed Protection (EWP) Program and (2) to outline an Emergency Recovery Plan for the Commonwealth of Virginia that will enhance communication, cooperation, and coordination with various agencies when dealing with natural disasters.

Emergency Watershed Protection Program

Definition

The Emergency Watershed Protection program is a program that NRCS can use to provide technical and financial assistance to communities whose watersheds have been damaged by natural disasters. Typical disasters include floods, fires, windstorms, and drought. The EWP program is used to restore the watershed(s) to a stable hydrologic function. The EWP program cannot be used for general maintenance of stream banks or long-term flood control.

The Natural Resources Conservation Service administers the program through the following authorities:

Section 216, Public Law 81-516;
Section 403 of Title IV of the Agricultural Credit Act of 1978, Public Law 95-334; and
Section 382, Title III, of the 1996 Farm Bill Public Law 104-127.

Responsibility for the program is assigned to the Secretary of Agriculture and delegated to the Chief of NRCS. NRCS State Conservationists administer EWP in their respective states and have sole authority to declare watershed emergencies.

NRCS may be involved in two different types of emergencies:

- Presidentially Declared Disaster
- Local Disaster

Through Public Law 93-288, the President of the United States can declare an area a "major disaster area". When this occurs, the Federal Emergency Management Agency (FEMA) is responsible for coordinating all the disaster activities. EWP assistance may be provided if the NRCS State Conservationist determines the program is applicable.

In the absence of a presidentially declared event and when local conditions warrant, the NRCS State Conservationist may declare a "local" emergency and provide assistance to requesting sponsors under the EWP program. The Federal Emergency Management Agency may not be involved in recovery activities after local disasters, creating a greater coordination role for NRCS. It is the NRCS Program Manager's responsibility to keep FEMA informed of NRCS emergency activities when involved in a local disaster.

Funding for the EWP program is not a budgeted line item. Funding for this program is in the form of supplemental appropriations from Congress on an as needed and as available basis. Therefore, funding to carry out this program is never guaranteed to be available at all times.

Program Criteria

The Emergency Watershed Program can be used whenever a natural disaster creates a sudden watershed impairment that is a threat to life and/or property. Normal rainfall events and normal maintenance do not meet these criteria.

All applicable federal, state and local laws, and regulations must be adhered to in carrying out emergency watershed protection measures.

Types of Emergencies

There are two categories of work within the EWP program: "Urgent and Compelling" and "emergencies". The NRCS definition of "Urgent and Compelling" is a situation where an immediate response is required to protect against an imminent threat to life and/or property. An imminent threat is present when there is the potential for a subsequent natural occurrence of the same intensity or less to cause significant damage to property and/or threaten human life. The term "property" applies to significant infrastructure such as dwellings, office buildings, utilities, bridges, and roads. NRCS has five days to complete the work once there is access to the site. All other situations will be called "emergencies" and need to be completed within 220 days of the event.

Typical Measures

In Virginia, floods cause the majority of the watershed impairments. The two most common impairments are stream bank instability and a loss of capacity within the stream channel. Stream bank stabilization and obstruction removal are typical measures used to reduce the threat to life and property. Sediment, cobble, woody material, and household debris are the usual causes of stream channel obstruction.

Watershed dams constructed by NRCS under the PL-566 and PL-534 programs that have been damaged by flooding are eligible for assistance with repairs if the dam has been properly operated and maintained by the sponsors.

The program now also allows for the repair of enduring conservation practices, work in damaged upland areas, and protection of agricultural land. NRCS can repair waterways, terraces, diversions, lagoons, and other practices that have been damaged during an event. (Proposed.)

Eligibility

To be eligible as an EWP site, all of the following questions must be answered YES:

- Has there been an unusual event that has caused a sudden impairment in the watershed?
- Has the impairment caused a threat to life and/or property?
- Can the threat to life and/or property be removed with the action?
- Is the project environmentally, socially, and economically defensible and technically sound?

- Is there an eligible sponsor willing to contribute 25 percent of the costs toward the project, obtain necessary permits, assume the operation and maintenance, and acquire the necessary easements? (Note: a sponsor is not needed to participate in the floodplain easement program.)

Ineligible Activities

EWP funds cannot be used for the following:

- Perform operation and maintenance or solve watershed problems that existed before the disaster.
- Repair, rebuild, or maintain public or private transportation facilities or correct damage to transportation facilities eligible for assistance under the Emergency Relief Program administered by Federal Highway Administration of the Department of Transportation.
- Perform EWP work on land owned by and/or managed by other federal departments and agencies. (The only exception is land managed by the U. S. Forest Service.)
- Repair erosion damage to beaches, dunes, and shorelines damaged by erosion as a result of wave action.
- Landscape for aesthetic purposes.
- Remove sediment or debris from reservoirs or debris basins. (This is considered operation and maintenance, regardless of ownership.)
- Rebuilding or protecting when there isn't anything left to protect.
- Drilling wells, constructing pipelines, installing irrigation equipment, or purchasing portable equipment to address drought.
- *Provide recovery assistance to a site more than twice in any ten-year period*. (Proposed.)

Emergency Recovery Plan

Purpose

The Natural Resources Conservation Service (NRCS) Emergency Response Plan for the Commonwealth of Virginia has been developed to enhance the coordination, cooperation and communication among participating governmental agencies prior to and during natural disasters.

Definitions

The following terms are used throughout this Emergency Recovery Plan:

Local Contact (LC) (See "Role and Responsibilities of the Local Contact", Page 10)	The Local Contact is generally the NRCS District Conservationist (DC) for the affected area. However, in areas without an assigned DC, other NRCS staff may fill the role of the local contact. The local contact understands the basics of the EWP program and its eligibility criteria and performs the ongoing work of establishing key contacts and potential sponsors for future EWP projects.
Field Coordinator (FC)	The Field Coordinator is responsible for the management of EWP fieldwork. This person will coordinate and schedule EWP field staff for DSR assessments, contracting, construction, and inspection.
Sponsor	A sponsor is a qualifying local unit or subdivision of state government, city, county, tribe or conservation district.
EWP Program Manager	The Program Manager is responsible for providing leadership and oversight of the EWP program.
State Conservationist	The State Conservationist is responsible for all NRCS activities and programs in Virginia.
Damage Survey Report (DSR)	The DSR documents damages; proposed work; economic, social and environmental defensibility; sketches of the site; standard drawings; maps; photos; GPS data; and other information as needed. Every site will have a DSR completed. The DSR serves as the NRCS documentation that the site has been evaluated.
DSR Team	A DSR Team is an NRCS interdisciplinary team that performs site assessments and completes the DSR. Typically, the team will consist of an engineer, a biologist, and a resource conservationist. The DSR team may include non-NRCS members such as sponsor representatives and technical personnel from other agencies.

Emergency Recovery Plan Process

Watershed Impairment Occurrence

When a sudden watershed impairment occurs, the Local Contact becomes the facilitator for EWP program activities by working with sponsors, landowners and government entities. The local contact will immediately notify the Field Coordinator and EWP Program Manager and begin the process to identify the magnitude and location of the damages. Contacting the local emergency management agency and other local agencies may be necessary at this time.

Preliminary Assessment

Once the Local Contact has identified the preliminary damage locations, a site visit will be conducted. The Local Contact will evaluate the extent of the damaged areas and make a preliminary determination on the potential for EWP work. The EWP Field Coordinator and EWP Program Manager shall be contacted for guidance on questionable sites. The local contact will start developing an information file for the potential projects.

Identify Sponsorship Interest

The Local Contact should contact potential sponsors prior to conducting disaster assessment to determine their interest and ability to be sponsors. Interest in sponsoring projects can change over time because of fluctuating financial capabilities or concerns about activities such as acquiring permits or obtaining easements.

Request for Financial and Technical Assistance

The sponsor will submit a request for NRCS technical and financial assistance if potential eligible sites are found in the preliminary assessment. The request is submitted to the NRCS State Conservationist and must contain the sponsor's commitment of 25% of the construction cost for priority sites, and the name of the sponsor's technical and administrative representative. A sample request letter is contained in Appendix A.

Eligibility Assessment

Eligibility and damage assessments for sites previously screened and determined potentially eligible will be conducted by an interdisciplinary team. The EWP Field Coordinator will notify the Program Manager, and with the concurrence of the Assistant State Conservationist (FO) and the State Conservation Engineer, assign staff to NRCS interdisciplinary DSR team(s). Staff from the entire state may be recruited to acquire the necessary resource disciplines. If warranted, a temporary EWP office may be established and staff detailed to facilitate efficiency of implementation.

An interdisciplinary team will visit each potential EWP site, complete a DSR, determine project eligibility, consider and evaluate environmentally, socially, and economically suitable solutions

for eliminating the imminent threat, and develop a cost estimate. A DSR will be completed for each site evaluated, even if it is determined to be ineligible.

After the DSRs are complete, the Local Contact will inform the sponsors of the findings. The sponsors will use this information to set priorities for the work to be done. The sponsors will then obtain the permits and landrights that are required before they can enter into a Project Agreement with NRCS.

Project Design

After determining site eligibility, the DSR team will determine the work necessary to remove the threat. Standard design drawings will be used by the DSR team, where practicable. The State Engineer may assign additional survey and design teams, if determined necessary by the DSR team.

Permitting

The EWP sponsor is responsible for obtaining all necessary permits to complete the project. NRCS will assist the sponsor by providing the information needed in the permitting process. Each DSR will include all of the known environmental, cultural, and social effects of the proposed work in order to expedite the review by the permitting agencies. State and counties may also require additional permits for activities such as grading, burning, and erosion and sediment (E&S) control. NRCS will not knowingly start any EWP measure before all required permits are obtained by the project sponsor.

Project Agreement

The Project Agreement can be initiated after eligibility is determined and funding obtained but can not be finalized until all the needed permits have been obtained. The NRCS Contracting Officer will initiate the Project Agreement. The Project Agreement specifies the scope of work to be performed, project costs, in-kind contributions, and terms for accepting the completed project. A sample Project Agreement is contained in Appendix A.

Federal Contracting Process

Once the project agreement is signed, the NRCS Contracting Officer, with the assistance of the DSR team engineer, will prepare the bid package in accordance with applicable contracting rules. As part of the bid process, the contracting officer, project engineer, project inspector, and the project sponsor will conduct a site showing for potential contractors. The Contracting Officer will conduct the bid opening, check contractor references, and award the contract.

Construction Inspection

Project work begins once the contract has been awarded. An assigned project inspector and Contracting Officer's Representative (COR) will monitor the project work. The inspection

process ensures that the project is conducted in accordance with the project design, contract specifications, and permit requirements, if applicable.

Project Completion and Acceptance

Upon completion of a project, the project sponsor, COR, and Contracting Officer will review the work to ensure all the necessary items are completed according to the requirements specified in the project agreement. If the project work is deemed complete, the project is accepted and as-built drawings, if applicable, are prepared. After project acceptance, the budget officer will issue a payment to the contractor and send an invoice to the sponsor for reimbursement of the sponsor's share of the project costs.

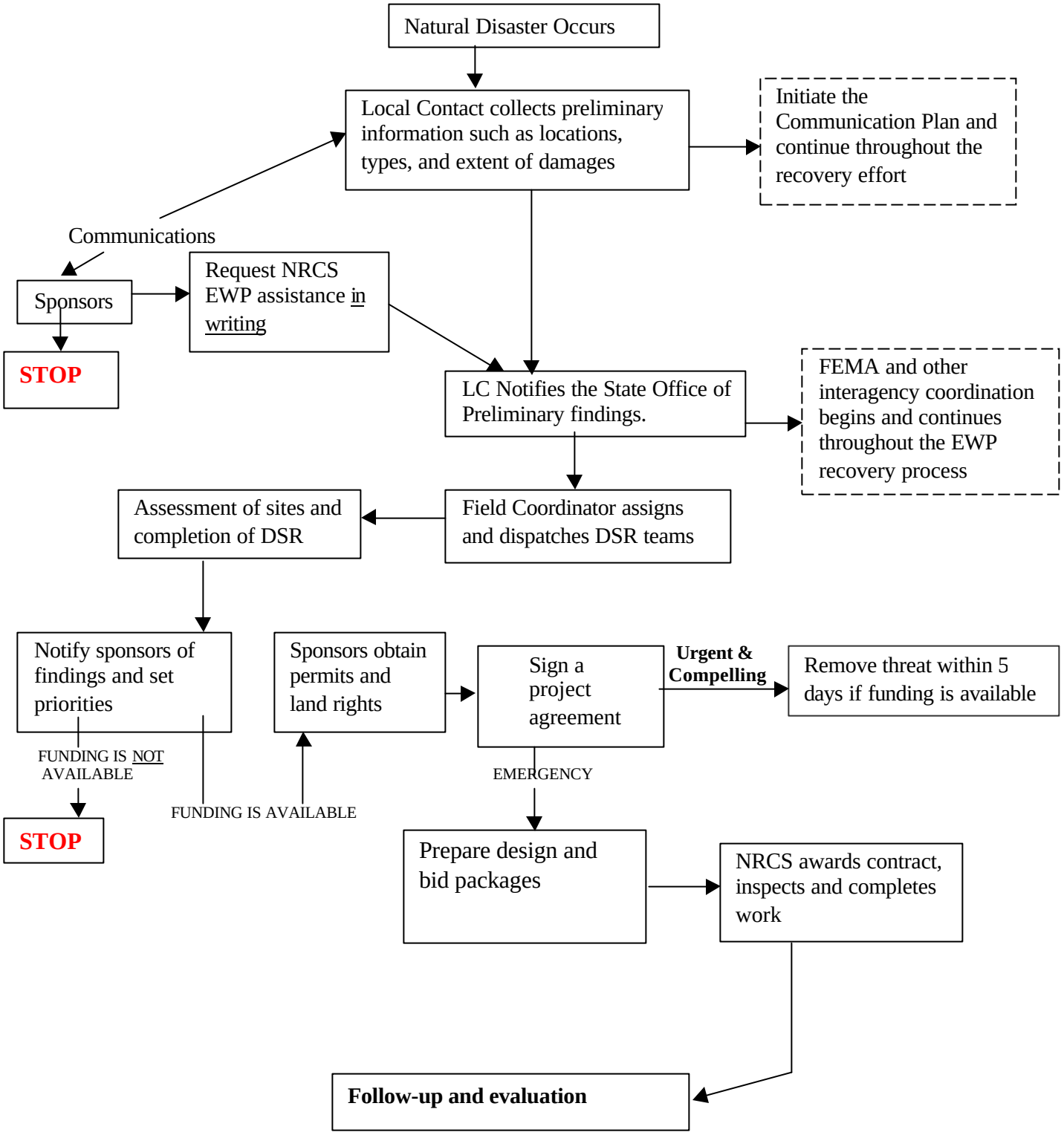
Project Evaluation and Follow-up

After the EWP work is completed, the EWP Program Manager, EWP Field Coordinator and other staff will evaluate NRCS's response to the emergency and the effectiveness of the processes used to implement the program. Input from all partners, including sponsors, agencies, citizens' groups and congressional delegations, will be solicited. Evaluation of the current program and suggested changes to improve the program effectiveness, delivery, administration, and environmental effects will be reviewed. Necessary changes shall be incorporated to improve the process to address future disasters.

Communication Plan

A communication plan will be developed and will be implemented throughout the EWP recovery effort. The purpose of the plan is to inform the targeted audiences of the extent of damages, status of the recovery, and provide general information concerning the EWP recovery program.

Figure 1. NRCS Emergency Watershed Protection Flow Chart



Sponsor Responsibilities

Who Can Be a Sponsor

NRCS always works through a local sponsor to implement the EWP program. A sponsor must be a local unit or subdivision of state government, State government, or other governmental entity with taxing authority, such as conservation district, city, county, or Indian tribe.

In Virginia, NRCS has worked with counties and cities on previous disasters and emergencies. Counties have sponsored the majority of the projects.

Responsibilities

- Submit an initial written request to the State Conservationist requesting NRCS assistance within 60 days after the event (See Appendix A for a sample letter.) Assign a technical and administrative contact to address necessary correspondence and provide information to the NRCS Local Contact.

- Acquire all necessary permits prior to construction. NRCS will provide the sponsor with necessary drawings and other technical information that is required for the permit applications.

- Ensure utilities are located and appropriate easements have been acquired before construction begins.

- Enter into a written agreement with NRCS outlining responsibilities and obligations. (See Appendix A for an example of a project agreement.) (EWP funds may not be used to reimburse sponsors for work carried out prior to the signing of a project agreement by the sponsors and NRCS.)

- Agree to provide for the operation and maintenance of completed structural measures. Operation and maintenance may not be delegated to the private landowner. NRCS will supply the sponsor with an operation & maintenance plan.

- Provide 25 percent of construction costs (cash and/or approved in-kind). Tasks such as acquiring land rights and permits will not be credited as in-kind expense.

- Set priorities for order of site visits to be completed with the DSR team(s). Sponsors may have a representative on the DSR team. The sponsors may appeal technical determinations made by the DSR team. Sponsors assist NRCS in setting the priorities of work to be completed.

- As determined and agreed upon, the sponsor may administer construction contracts to perform work.

Cost Share

Federal funds can provide up to 75 percent of the construction costs of emergency measures. Eligible Forest Service projects are funded at 100 percent and the funds are transferred between the agencies at the national level.

There are certain counties/communities in the states that have depressed economies that NRCS refers to as "limited resource areas". To assist these communities in coping with disaster events, the federal government will pay 90 percent of the costs needed to complete the project. To be considered a limited resource area, the county must meet all three of the following criteria:

- *Average housing values must be less than 75 percent of the state average housing value;*
- Per capita income must be 75 percent or less than the median income for the nation; and
- Unemployment rate must be twice the U.S. average over the past three years.

The only counties that are designated as limited resource areas meeting all three of the above criteria from the most recent data available are: Wise, Dickenson, and Buchanan.

Sponsors may provide documentation to qualify the limited resource areas on a community basis. The NRCS State Conservationist may grant an exception on a community basis if the criteria in 390-V-NEWPM501.06(d) can be documented. (Proposed.)

Damage Assessment

Role and Responsibilities of the Local Contact

In the days following a natural disaster, the Local Contact has an important and often difficult role to play. The Local Contact is usually the NRCS person assigned to that county, and the conduct of the Local Contact will set the tone for future relationships between NRCS, sponsors, and landowners.

The Local Contact should remain calm, and remember that this may be a long recovery process over several months. The victims of the disaster may be angry, or in shock. They want to be heard, so become a good listener, but do not make promises that NRCS can not keep. The LC will need to help people make the distinction between response operations, such as those needed to get people to safety, and recovery operations, such as restoring the stream channel capacity or debris removal. The EWP program is used only for recovery operations after the disaster event has ended and the full extent of the damages has been determined.

The Local Contact should:

1) Determine within 24 hours where damages and stream blockages have occurred. This can be done quickly by telephone calls to key landowners, visual inspections, Weather Bureau Reports, Internet weather maps, and conversations with other county and agency personnel such as VDOT.

2) Notify the NRCS State Conservationist, the EWP Program Manager, your supervisor, and the local SWCD of the disaster situation. Be prepared to report the approximate number of sites

where people, dwellings, highways, streams, and structures have been affected. This information will change several times as more sites are found. Please continually communicate this information to all concerned. *Limited funding may be available for Urgent and Compelling situations. Contact the Program Manager for more information.

3) Make a report of these findings to the Sponsors Representative. (In an independent city, the City Manager is usually the primary contact.) The sponsor will appoint a technical and administrative contact. Other County personnel who may be of help are the Geographic Information System Coordinator for the county and the Comptroller. Make the potential sponsor aware of: A) the purpose of EWP and its financial obligations; B) the need to apply to NRCS for assistance; C) their responsibility to obtain and certify landrights signatures for landowners affected; and D) their responsibility to obtain necessary environmental permits. Furnish the County Administrator or City Manager with a copy of the example EWP letter of request for assistance from NRCS found in Appendix A. If the sponsor is interested in this recovery program, proceed to item 4.

4) Notify the EWP Program Manager of the Sponsor's wish to proceed with EWP. Prepare for the Damage Survey Teams to report to your office. Be aware that usually the local contact only helps the DSR teams with tasks such as site location and landowner contacts. The DSR teams independently make the final site eligibility decision and determine the extent of work to be performed.

5) Maintain a telephone log sheet that contains the following information: name, address, telephone number, statement of problem, stream name, date, and time of call.

6) Coordinate local fact finding, and recovery efforts with the County/City, VDOT, USFS, and FEMA, and others, as necessary.

7) Implementation of the communication plan.

8) Prepare available information and equipment for use by the DSR Team.

   A. Tech Guide Section I - Threatened & Endangered Species Maps, Cultural Resources Data (if available), other resource data – wetland maps, soils information, stream classifications;

   B. File folders for each DSR site, highway or street maps with streams, names & route numbers, GPS devices, digital cameras, topographic maps or Terrain Navigator software, compass, clip boards with pads of paper, hand levels, survey rods, measuring tapes and/or wheels, clinometer, copier, fax machines, two way radios, survey ribbon, marking paint, surveying stakes, hammers, and marking crayons or markers;

   C. List of local contractors with equipment list and rate;

   D. Copies of the Landrights Permission Sheet (from Appendix A);

   E. Directory of essential personnel and agencies; and

   F. List and location on a map of possible disposal areas.

Roles and Responsibilities of the DSR Team

After the sponsors request NRCS assistance, the Field Coordinator , the Assistant State Conservationist (Field Operations), and State Conservation Engineer (SCE) will identify the staff members who will serve on the DSR Teams. Prior to beginning the recovery work, all NRCS employees involved in the program will receive EWP refresher training.

The determination of eligibility and damage assessment of each site or closely grouped sites will be documented through the completion of a Damage Survey Report (DSR) (Appendix B). The DSR will be completed on site by an interdisciplinary team. The DSR team will consist of a minimum of three NRCS employees: an Engineer, a Biologist, and a Resource Conservationist. Additional NRCS staff, such as an economist, a sociologist, or the cultural resources specialist may be needed on the DSR Team. The Sponsor's representatives, personnel from other agencies, and others may be invited to participate in the site assessment process. A District Conservationist or other local person knowledgeable of the area will participate on the team to provide local data and knowledge to the team that is necessary in completion of the DSR. This local resource person generally will not be involved in determining the eligibility of the sites for funding. Each DSR team will have at least one NRCS employee who has completed the NRCS Cultural Resources Training.

The DSR for each site will document the alternative analysis, the economic, social, and environmental defensibility, and the technical soundness of the selected alternative. The DSR site sketch will show pre-storm and post-storm conditions, the work to be completed, work limits, haul roads, dump sites, and protected areas. The DSR team will attach the appropriate standard drawings (Appendix B) of work to be included at the site on each DSR. Standard seeding/vegetation specifications and other information shall be added as determined necessary by the team.

Each DSR will include GPS data. This data will be recorded in NAR-North American 83 or NAS-C NA27 Conus/Clk66 format. Lat-Long (degree, minute, seconds) will be used as the recording format configuration. Each site will be located on a county/city road map and on a copy of the USGS topographic quadrangle map. The USGS quad name will be noted on the DSR form.

Photographs, either digital or prints, will be taken at each site. The photographs will become part of the DSR and will supply additional documentation of the conditions found by the DSR team.

Ineligible Sites

Only Pages 1 and 6 of the DSR will be needed to document sites that were evaluated but deemed ineligible. In these cases, on page 6 in the remarks section, the DSR team will document the reason for ineligibility. An example of this would be "no stream flow impairment" or "does not meet economic defensibility."

Urgent and Compelling Sites

A DSR will be completed for all urgent and compelling sites prior to starting work. However, the initial DSR may cover just the work necessary to relieve the urgent and compelling situation. This work must be completed within 5 days of discovery of the site. A second DSR and contract may be necessary to alleviate any remaining hazard causing an emergency situation.

Each DSR team will have an updated list for equipment rental rates and a list of contractors who can respond quickly to the site when called. The team engineer will determine a cost estimate for work to relieve the U&C situation. The team leader will coordinate with the state EWP Program Manager to ensure adequate funds are available prior to contacting the contractor to perform the U&C work. The sponsor must obtain land rights and permits and agree to pay their 25% of the construction cost prior to any work being performed.

USDA/Forest Service Property

The EWP program manager will appoint a minimum of two NRCS employees to assist the Forest Service (FS) in damage assessment and DSR completion. The employees will usually be a resource conservationist and an engineer. The FS will provide the remaining members of the interdisciplinary team to evaluate and determine eligibility of sites on FS land. The EWP eligibility criterion remains the same, and DSR completion and approval by the EWP Program Manager are necessary prior to any transfer of money. USDA Forest Service is solely responsible for all practices, design, implementation, permits, and land rights necessary to complete work on National Forest land.

Design & Typical Measures

Design

In most channel repair situations, the engineer will use standard drawings of typical measures to prepare the design. These standard drawings are located in Appendix B. As needed, the engineer will make pen-and-ink changes to customize these drawings for the conditions found on the site. For example, the height of the riprap toe may be three feet high on one site and six feet high on the next one. The Construction Specifications applicable to the site will also be attached.

For sites where the typical measures cannot be used, the engineer will design a solution in accordance with NRCS Standards and Specifications. Custom designs will be required for dam repairs, urban sites, and sites where there are unusual safety concerns.

Standard price lists will be developed for use in preparing the engineer's cost estimate. This list may vary from area to area within the state due to differences in the difficulty of performing the work, availability of materials, and availability of contractors.

Typical Measures

NRCS uses several practices to stabilize watersheds after a natural disaster. These measures focus on eliminating those watershed impairments that present a threat to life and property. The typical measures detailed here have been utilized in past Virginia EWP recovery work.

Floodplain Management

Cobble, sediment, and woody debris cleaned out of the stream channel and other areas in the floodplain will be removed from the floodplain to an approved disposal area. Scour areas created by the flooding event may be filled with the cobbles and sediment to match the existing contours of the natural floodplain prior to the event. *Cobble and sediment deposition in agricultural fields may be removed to the natural floodplain elevation. (Proposed).* EWP will not be used to prevent flooding by constructing berms or building up the floodplain. NRCS may offer interested landowners in targeted and priority areas the option of a permanent EWP floodplain easement. (See Floodplain Easements, p. 27.)

Stream Bank Stabilization

These practices are used to stabilize or protect banks of streams or excavated channels for one or more of the following purposes: 1) to prevent the loss of land or damage to utilities, homes, buildings, roads or other facilities adjacent to the banks; 2) to maintain the capacity of a channel; or 3) to reduce sediment loads causing downstream damages and pollution. Normally, the banks are sloped back and stabilized with soil bioengineering techniques, gabions, and/or rock rip-rap, depending on the site characteristics, stream velocities, stream configuration, and importance of the structure(s) to be protected. The top of the bank is seeded to grass. The species of grasses chosen will depend on optimum planting dates and site-specific conditions.

Soil Bioengineering: This is a system of living plant materials used as structural components. Adapted types of woody vegetation (shrubs and trees) are initially installed in specified configurations that offer immediate soil protection and reinforcement. Toe armor is commonly used with the vegetation for bank stability. Environmental benefits derived from the presence of woody vegetation include diverse and productive riparian habitats, shade, organic additions to the stream, cover for fish, and improvements in aesthetic value and water quality. For stream banks, living systems include brush mattresses, live stakes, joint plantings, vegetated geogrids, branch packing, and live fascines. Due to the narrow window for establishment dates, the amount of plant materials required, and the cost, this has not been a preferred option. However, NRCS is aware of the need and the environmental benefits and this option will be considered as an alternative for more sites.

Stream Barbs: Stream barbs are usually low rock sills or logs projecting out from the stream bank and across the stream's thalweg to redirect stream flow away from an eroding bank. Flow passing over the barb is redirected so that the flow leaving the barb is perpendicular to the barb centerline. Stream barbs are always oriented so that they point upstream.

Gabions: Gabions are rectangular wire baskets that are filled with rock 4-6 inches in diameter. The baskets are stacked on top of one another and can be placed adjacent to vertical slopes. Gabions are used where space is limited.

Rip-Rap: Rip-rap is quarry stone with sharp angles which lock into position with other pieces of stone to create a stable stream bank covering. Rip–rap is used on eroding banks where space is available and proven protection is needed. This is usually near a structure or where a curve in the stream should not be allowed to migrate, such as immediately

upstream of a bridge. It may be used as toe armor for soil bioengineering stream bank stabilization projects.

Root Wads: Root wads are portions of trees that have about 20 feet of the bole still attached to the roots. During flood events, trees are often uprooted and subsequently, there is a usually a ready supply of root wads at or near EWP sites. These trees are placed into the stream bank so the roots are protecting the bank. Root wads are effective in protecting the stream banks in non-critical locations such as pastures and cropland fields.

Debris Removal

Accumulations of woody debris that divert water flow or plug a channel can cause flooding or safety hazards. Similar problems are associated with sediment, cobble or gravel depositions that have filled in a stream channel or hydrologic flood plain. With a reduced channel capacity, the flow of water can spread out over the floodplain where it floods adjacent homes and buildings. Debris removal may also include removing woody debris and other debris in upland areas away from the channel that pose a threat to human health, lives or property.

Grass/Legume Seeding

Seeding is prescribed as a means of reducing surface erosion. The objective is to provide rapid ground cover that will protect the soil from raindrop splash and surface runoff and provide a stabilizing root mass resistant to erosion. All disturbed areas within the EWP project work limits with exposed soil will be seeded to control erosion and decrease sedimentation. Refer to the "Plant Establishment Guide for Virginia" for specific recommendations.

Shrub and Tree Planting

Tree and shrub species may be planted for erosion control, protection of a watershed, and for wildlife habitat. Species selected will be adapted to the soil and site conditions and resistant to insect and disease. Due to the narrow planting window and slow establishment time, this is generally not recommended for EWP sites.

Channel Treatments

Low Flow Channel Establishment and Repair: In all EWP work where channels are redefined, modified, established or repaired, a geomorphic low flow channel will result. The channel will follow existing or natural meander patterns. Floodwaters will have access to the floodplain. Habitat enhancements may be incorporated into the design. Items such as randomly placed boulders and large woody debris anchored into point bars are examples.

Grade Stabilization: These treatments are used to reduce channel downcutting by establishing grade control, decreasing water velocity and maintaining correct width/depth ratio. Examples of this are rock vortex weirs.

Bank and Channel Armoring: This treatment is used to reduce the potential impacts from increased peak flows on unstable stream reaches. Armoring is the placement of rock along unstable stream banks and along the toe of slopes to provide stability against the increased peak flows anticipated as a result of subsequent storms.

Channel Clearing and Snagging: This treatment is used to reduce the potential damages to bridges and drainage outlets which may occur when floatable, down, and leaning vegetation in and around streams dam water and cause out of bank flows or increased flooding in minor storm events.

Agencies' Roles and Responsibilities

Federal Agencies

Federal Emergency Management Administration (FEMA)

The Federal Emergency Management Agency is an independent agency of the federal government, reporting to the President. FEMA's mission is to reduce the loss of life and property and protect our nation's critical infrastructure from all types of hazards through a comprehensive, risk-based, emergency management program of mitigation, preparedness, response, and recovery. For "Presidentially declared" disasters, FEMA coordinates the federal government activities and is the lead federal agency. The NRCS EWP Program Manager will coordinate NRCS recovery efforts with the appropriate FEMA official. However, FEMA will not coordinate NRCS work unless conflicts arise from adjacent sites. If FEMA transfers this responsibility to Federal Regional Council or other authorized agency response efforts, NRCS will be responsive to that council or organization.

FEMA offers three financial assistance programs. The Individual Assistance Program provides money to people and businesses to help them get back on their feet. Examples are low interest loans, cash grants, housing assistance, and crisis counseling. The Public Assistance Program has grants available to assist state and local government agencies and certain private nonprofit organizations. The Hazard Mitigation Program assists with activities that reduce or eliminate losses from natural disasters. Example of mitigation include keeping homes away from the floodplains, engineering bridges to withstand earthquakes, and creating and enforcing effective building codes. This program is available to local and state government agencies, certain private nonprofit organizations, and tribes.

U.S. Army Corps of Engineers (USACOE):

The Regulatory Division within the Corps administers Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act. Federal law (Section 404 of the Clean Water Act) prohibits the discharge of dredged or fill material into waters of the United States which includes wetlands, without a Department of Army permit issued by the Corps of Engineers. Under Section

10 of the Rivers and Harbors Act, no work may commence in traditional navigable waters of the U.S. without a permit from the Corps.

The Corps Nationwide 37 permit specifically addresses the NRCS Emergency Watershed Protection Program activities when dealing with "exigency" (now "urgent and compelling") and "emergency" situations. When EWP recovery efforts require working in "waters of the U.S.," the NRCS Environmental Specialist will coordinate all recovery work and any needed mitigation with the USACOE. The project sponsor will obtain all necessary permits prior to commencement of "Urgent and Compelling" and "Emergency" EWP actions. Permitting procedures for EWP work are outlined in the interagency agreement found in Appendix C.

U. S. Forest Service (USFS)

The FS is eligible to receive EWP assistance and funding to remove watershed impairments that occur on land that is owned by the federal government and managed by the USDA FS. The FS will sponsor all recovery work that meets eligibility requirements and is supported by a Damage Survey Report. The NRCS EWP Program Manager will coordinate site evaluations, review/approve DSRs, and request funding for approved sites. The funding will be executed at the National Office Level.

U.S. Fish and Wildlife Service (USFWS)

The U.S. Fish and Wildlife Service's mission is to work with others to conserve, protect and enhance fish, wildlife, and plants and their habitats for the continuing benefit of the American people. The U.S. Fish and Wildlife Service also is responsible for managing endangered and threatened species. They provide information on the location of various endangered species and ways to reduce the impact when working within or adjacent to their habitat. The NRCS Environmental Specialist will coordinate all work with the USFWS to comply with the Endangered Species Act and other pertinent laws and Executive Orders.

Farm Services Agency (FSA)

FSA administers the USDA Crop Commodity Programs, the Conservation Reserve Program, the Emergency Conservation Program (ECP), and other farm programs. The EWP Program Manager will coordinate NRCS recovery efforts with FSA. NRCS coordination will ensure that the EWP program recovery efforts, particularly on upland sites and in cropland, do not compete with or diminish the ECP program or any other programs administered by FSA.

State Agencies

The NRCS Program Manager or appointee will be responsible for coordinating work with all state agencies with emergency services, natural resources, historic, environmental management, and conservation responsibilities.

Virginia Department of Transportation

The Virginia Department of Transportation is responsible for the construction and maintenance of the roads, bridges and tunnels in the Commonwealth. Many times after a major disaster, the VDOT is a response agency protecting bridges and re-establishing roads and access. VDOT owns and maintains road rights-of-ways and generally limits works within those rights-of -ways. The Federal Highway Administration administers the Emergency Relief Program, which provides federal aid for repairing damage to public highways. The Emergency Relief Program helps State and local highway agencies pay the unusually heavy expenses of repairing serious damage resulting from natural disaster or catastrophic failure. The NRCS EWP program may not be used on roads that are eligible to receive this funding. NRCS coordinates with VDOT on sites upstream of roads and bridges that are off the VDOT right-of-way and on disposal locations.

Virginia Department of Emergency Management (VDEM)

The Virginia Department of Emergency Management's mission is to protect the lives and property of Virginia's citizens from emergencies and disasters by coordinating the state's emergency preparedness, mitigation, response, and recovery efforts. The VDEM works closely with local government emergency managers, other state agencies, volunteer organizations, and federal agencies, such as FEMA, to ensure a comprehensive, efficient, and effective response to emergencies and disasters throughout Virginia. The Emergency Management Division (EMD) of VDEM coordinates all emergency management activities protecting the people, property, economy, and the environment within the state. The declaration of STATE OF EMERGENCY empowers VDEM to act on behalf of the Governor to access the resources and assets of state agencies to provide immediate aid in response to the crisis. NRCS works closely with VDEM to ensure that efforts made by the two agencies during disaster recovery are complementary.

Virginia Marine Resources Commission (VMRC)

The Habitat Management Division of VMRC is responsible for the management of sub-aqueous lands, tidal wetlands, and coastal dunes. Particular emphasis in this regard has been applied to the reduction of unnecessary filling of State stream bottoms, the reduction of obstructions or hazards to navigation, and the prevention of structures encroaching into adjoining riparian areas. Environmental permits are required when working in subaqueous land.

Virginia Department of Game and Inland Fisheries (VDGIF)

VDGIF is the state agency responsible for the management of Virginia's wildlife and inland fisheries. The agency goal is to maintain optimum populations of all species to serve the needs of the Commonwealth; to provide opportunity for all to enjoy wildlife, inland fish, boating and related outdoor recreation; and to promote safety for persons and property in connection with boating, hunting and fishing. VDGIF provides environmental review for projects impacting streams, and other environmentally sensitive habitats. VDGIF Fisheries Biologists often serve on DSR Teams. VDGIF also reviews and comments on proposed work prior to VMRC permit issuance.

Virginia Department of Environmental Quality and State Water Control Board

The Virginia Department of Environmental Quality and the State Water Control Board regulate water resources and water pollution in Virginia. They administer programs created by the federal Water Pollution Control Act of 1972, commonly known as the Clean Water Act. Individual or general permits are required when work requires manipulation of surface waters. Activities requiring a permit include dredging, filling or discharging any pollutant into or adjacent to surface waters, or otherwise altering the physical, chemical or biological properties of surface waters by excavating, draining, filling, or degrading wetlands. DEQ may consult with other state and federal agencies, and meets frequently with VMRC and the Corps of Engineers to discuss the submitted applications. Federal permits must be validated by DEQ before issuance of a Virginia Waters Protection (VWP) permit/401 Certification. DEQ reviews and comments on all DSRs.

Virginia Department of Conservation and Recreation (DCR)

The Department's mission is to conserve, protect, enhance, and advocate the wise use of the Commonwealth's unique natural, recreational, scenic, and cultural resources. DCR's programs are grouped according to function. The major areas are non-point source pollution (NPS) control, urban programs, and district and landowner assistance.

Division of Soil and Water Conservation

Most DCR Soil and Water Conservation Division efforts are devoted to controlling nonpoint source pollution. In addition to NPS control, soil and water conservation staff supports DCR's mission of reducing the risk to life and property from flooding and shoreline erosion. Technical assistance, financial assistance, education, and research efforts are enhanced by funds available from the Federal Nonpoint Source Pollution Control Program (Section 319 of the Clean Water Act) and the Chesapeake Bay Program. As requested, DSWC staff may serve on DSR Teams.

Floodplain Management Section

The Floodplain Management Program manages Virginia's flood hazards. In particular, it strives to prevent loss of life, reduce property damage, and conserve the natural and beneficial values of the Commonwealth's river and coastal floodplains. The program has five functional elements: hazard mitigation, community education, National Flood Insurance Program (NFIP), coordination of flood protection programs, and Flood Prevention Protection Fund. The staff of the Floodplain Management Program provides assistance to NRCS on floodplain issues, as needed.

Division of Dam Safety

The purpose of the Dam Safety program is to provide for safe design, construction, operation, and maintenance of dams to protect public safety. No person or entity shall construct, begin to construct, alter, or begin to alter an impounding structure until the Virginia Soil and Water Conservation Board (VS&WCB) has issued a construction permit. The NRCS State Conservation Engineer will coordinate with the DCR Division of Dam Safety when repairs are needed on PL-566 and PL-534 watershed structures or other dams.

Division of Natural Heritage (DNH)

The mission of the Division of Natural Heritage is to conserve Virginia's biodiversity. The Natural Heritage Program is a comprehensive effort to inventory and preserve the animal, plant and natural community resources of the Commonwealth of Virginia. This program contributes to an understanding of global biodiversity and helps to provide for the recovery of vanishing species and communities. During EWP, DHR provides the Threatened and Endangered Species maps and they may provide a quick review of DRSs, as needed.

Soil and Water Conservation Districts (SWCD)

Soil and water conservation districts were established in the 1930s to provide local input on development of comprehensive programs and plans for the conservation of soil resources, control and prevention of soil erosion, flood prevention, and conservation, development, utilization and disposal of water. Forty-six districts serve as local resources for citizens in most Virginia localities. Since the mid-1980s, DCR has relied heavily on districts to help deliver many programs aimed at controlling and preventing nonpoint source (NPS) pollution. With their volunteer boards and more than 100 full and part-time technical and administrative employees, districts bring DCR a valuable delivery system for Virginia's statewide NPS management program and various USDA programs. SWCD personnel may serve on DSR Teams to provide local knowledge and facilitate contacts.

Virginia Department of Historic Resources (VDHR)

The Virginia Department of Historic Resources is the State Historic Preservation Office. The mission is to foster, encourage, and support the stewardship of Virginia's significant historic, architectural, archaeological, and cultural resources. Government agencies are responsible for compliance with Section 106 of the National Historic Preservation Act for any undertaking. DHR will provide historical and cultural reviews of NRCS EWP sites, as requested.

Virginia Cooperative Extension Service (ES)

The Virginia Cooperative Extension Service works with local citizens to design, implement, and evaluate programs that lead to societal, economic, and environmental benefits to their community. During EWP, the Extension Service could serve as local contacts to DSR teams. They may also refer landowners to NRCS for assistance.

Virginia Department of Agriculture and Consumer Services (VDACS)

The Department of Agriculture and Consumer Services has legal authority for protection of endangered and threatened plant and insect species and are responsible for their conservation in Virginia. The Virginia Endangered Plant and Insect Species Program personnel cooperates with the U.S. Fish and Wildlife Service, the DCR Division of Natural Heritage, and other agencies and organizations on the recovery, protection or conservation of listed threatened or endangered plant and insect species and designated plant and insect species that are rare throughout their worldwide ranges. Where the Plant and Insect recovery plans are available, and to the extent possible, NRCS will adhere to the order and tasks outlined in the plans.

Virginia Department of Forestry (DOF)

The DOF is the agency responsible for the management and health of the Commonwealth's forest resources. DOF foresters and other technical experts assist the citizens of Virginia to manage woodland, riparian areas, and forest in an economical and environmentally sound manner. DOF county rangers assist landowners, industry, and others by writing individual management plans for planting, growing, and harvesting timber and woodland resources. DOF is the lead state agency in woodland fire prevention and suppression. Burning permits are required for outdoor fires and are issued by the county rangers. In some places, DOF may be able to provide equipment needed to address urgent and compelling situations.

Local Coordination

Multi-level coordination is necessary for the EWP recovery to be completed within the time frame required by the program guidelines. The NRCS EWP Program Manager, the District Conservationist, and the DSR Team Leader will all work closely with the sponsor to fund, plan, prioritize, and complete the EWP recovery. The local Soil and Water Conservation District will also be highly involved in many aspects of the recovery effort at the local level.

Environmental Coordination

Threatened and Endangered Species

A Threatened and Endangered Species review will be conducted for each site and documented on the Environmental Evaluation (EE) portion (p.4) of the DSR according to the process listed in Section I of the NRCS Field Office Technical Guide (FOTG). Both Division of Natural Heritage and the Virginia Department of Game and Inland Fisheries T&E Species maps will be checked. These maps are located in Section I of the FOTG in each office. NRCS will consult with the USFWS, VDACS, VDNH, and VDGIF if NRCS undertakings are determined to have a potential effect on the population or habitat of a threatened or endangered species. T&E Species consultations, if necessary, will take place prior to any work being performed at the EWP site.

Trout Waters

When EWP sites are located in trout waters, VDGIF will be notified. VDGIF fisheries biologists will have the opportunity to be part of the DSR team. Habitat improvement, bioengineering techniques to stabilize banks, and timing of work to avoid spawning will be considered as alternatives at each site. Low flow channels and a channel design based on fluvial geomorphology principles will be installed at each site where the DSR calls for channel modification.

Seeding and Vegetation Specifications

All areas disturbed as a result of NRCS EWP contracts will be seeded as part of the contract. Seeding recommendations and specifications will follow the "Plant Establishment Guide for Virginia." The Virginia Conservation Practice Standard , Stream bank and Shoreline Protection (Code 580), gives additional guidance for selection of vegetation. Three grass seeding mixtures will be utilized: 1) cool season grasses w/ no fescue, 2) cool season grasses w/ fescue, and 3) a

warm season grass mixture. The recommended mixture will depend on the time of year, soils, erodibility, land use, accessibility, position on the landscape, and other factors.

If the EWP work is completed in the seasonal window when shrubs may be established (winter-early spring), NRCS will consider planting shrubs to stabilize the stream banks where appropriate. The "Plant Establishment Guide for Virginia" and the Virginia Conservation Practice Standard , Stream bank and Shoreline Protection (Code 580), should be used to determine the species, rates, dates, and mixtures of recommended vegetation. Shrubs will not be planted in areas where cattle and livestock have access to the area to be stabilized.

Wetlands

The EWP DSR team will identify and delineate any wetlands that will be altered, drained or filled as a result of the selected alternative for EWP work. NRCS wetland teams will be consulted as needed. Wetlands in or near the EWP site will be shown on the DSR. During the alternative analysis and selection of the proposed action, the DSR team will consider the mitigation sequence of avoidance, minimization, and mitigation of wetland impacts. Unavoidable wetland losses will be mitigated according to NRCS policy and in consultation and agreement with the Corps of Engineers, VMRC, and DEQ.

Cultural Resources

At least one member of each DSR team will have completed the NRCS awareness training for cultural resources. Field reconnaissance will be conducted on each site and recorded on the EE form (p.4 of DSR). Department of Historic Resources will make the Virginia cultural resource database available to NRCS. NRCS will check the DHR database for each site. DHR will be notified of each site as the DSRs are completed. NRCS will adhere to the State Level Agreement between the NRCS and Virginia State Historic Preservation Office. Section 8 of this agreement sets forth a procedure to expedite cultural resources review in emergency situations. NRCS will follow national policy and the provisions of the state level agreement to comply with section 106 of the National Historic Preservation Act.

Bioengineering and Fluvial Geomorphology

Bioengineering will be promoted and utilized where appropriate. Bioengineering will not take the place of hard armor on stream banks where structural measures are necessary to provide protection. Principles of fluvial geomorphology will be applied in EWP planning, design and construction. Meanders of the streams will be maintained when possible. Low flow channels will be established and sized to match existing stable cross-sections upstream and downstream. Practices used will include root wads, rock vortex weirs, toe armor with vegetative slide slopes, stream barbs, and other techniques listed in chapter 18 of the Engineering Field Handbook.

Permits

NRCS shall not contract for the performance of any work in waters or subaqueous land in Virginia until the sponsor obtains necessary environmental permits. Stream work will involve obtaining a 404 nationwide or regional permit from the U.S. Army Corps of Engineers; a 401 or VWP (Virginia Water Protection) permit from the Virginia Department of Environmental Quality, and a Sub-aqueous Permit from the Virginia Marine Resources Commission. NRCS will assist the sponsor in obtaining these permits. Other local permits, such as a burning permit,

grading permit, or sediment control permit, may apply in some locations. If any of these permits are required, the sponsor must obtain them prior to the start of construction. The sponsor is responsible for any fees associated with the issuance of these permits.

In an effort to expedite the permitting process without sacrificing the environmental resource concerns, NRCS will enter into an agreement with the following agencies: Virginia Department of Environmental Quality, Virginia Department of Game and Inland Fisheries, Virginia Marine Resources Commission, the U.S. Army Corps of Engineers, and U.S. Fish and Wildlife Service. These agreements describe the procedures to be used in reviewing DSRs, performing site evaluations, and issuing permits for "urgent and compelling" and "emergency" EWP projects (Appendix C).

Contracting Procedures

Types of Contract

The Natural Resources Conservation Service has five methods of contracting for implementing EWP projects. They are federal contract, Contracting Local Organization (CLO) contract, locally led contract, force account, and performance of work.

A **Federal Contract** is used when the Federal Government is responsible for accomplishing the installation of the works of improvement, as well as the design (including specifications), inspection, and quality control duties. Depending on the size of the contract ($ amount), NRCS may use simplified acquisition procedures, a formal invitation for bids, request for quotes, or a purchase order to contract for the works of improvement.

- For projects estimated at less than $2,000, NRCS may use oral price quotations.

- For projects estimated between $2,000 and $99,999, written quotes are required. Contracts exceeding $2,000 require compliance with Davis Bacon Wage Rates. Contracts exceeding $25,000 require payment guarantees. Solicitations for work estimated to exceed $25,000 may need to be advertised in the FEDBIZOPPS (formerly Commerce Business Daily).

- Projects estimated to exceed $100,000 must use a formal solicitation method using sealed bids. Performance and payment guarantees are required.

To the extent practicable, NRCS is required to make use of available procurement preference programs. These include set-aside of contracts for 8(a) businesses and HUBZone contractors (businesses in high unemployment areas), which are programs supported by the Small Business Act. The Small Business Administration certifies businesses in these categories and they are notified of all awards. NRCS must also ensure that minority-, disadvantaged-, woman-, veteran- and disabled veteran-owned businesses are provided an opportunity to bid on the work to be performed.

A **Locally-Led Contract (Agreement)** is used when a sponsor assumes responsibility to contract for the installation of the works of improvement, the design (including specifications), and inspection, and quality control duties. The sponsor(s) will be given credit for 100 percent of the value of the design, contract award and administration, and inspection and quality control duties performed (duties usually performed by NRCS). The value of these services can be credited toward the sponsor's 25 percent share of the cost of installation of the works of improvement.

NRCS will review the drawings and specifications to ensure they meet the technical requirements of the project. The individual(s) responsible for this will be set forth in the project agreement. If necessary, time limits will be given. The sponsor responsible for the works of improvement will advertise for construction using policy, procedures, and regulations set forth by the sponsor, or by the State of Virginia, if the sponsor has no policy in place. The sponsor's contracting procedures must include the following:

- A financial management system
- A records management system
- A system for complying with all state and local laws and regulations
- Qualified design, inspection and quality control personnel
- A contract administration system
- A written code of standards and conduct
- Include special provisions (EO) provided by NRCS

The sponsors will provide the services of an inspector and quality control. NRCS and sponsors perform final inspection.

A **Contracting Local Organization (CLO) Contract (Agreement)** is a variation on the locally led contract method. The sponsors contract for the accomplishment of the works of improvement, and must comply with the same requirements set forth for locally led contracting. NRCS performs design, provides an inspector, and quality control.

Using the **Force Account** method, the Sponsor installs work with its own equipment and personnel and NRCS provides the drawings and specifications. The sponsor must prepare a plan of operations that must be approved by NRCS. The actual works of improvement must cost the sponsor less than $150,000. NRCS may advise, but cannot perform the work. The sponsor is required to keep detailed records of salaries and equipment expense, and NRCS audits the books to ensure proper payment.

A **Performance of Work Agreement** is used when the sponsor may not have the funds for their share of the cost of installing the works of improvement, or do not have an accounting system in place to keep the detailed records required by Force Account. However, they do have some personnel, equipment and/or materials or have donated personnel, etc., to carry out the work. This process also requires an approved plan of operations, and the price is determined prior to the start of the work. No record keeping is required since everything is agreed to before work begins.

In-Kind Contributions

All methods of contracting may offer certain opportunities for in-kind contribution. In general, in-kind contributions can include labor and equipment for any work that would normally be contracted for or something NRCS would be required to do in administration of the contracting process. In-kind labor is covered in 7 CFR 3016 and 3015. EWP measures are broken into two activities.

Installation Costs - The Federal Government pays 75% of the total cost and the Sponsor pays the remaining 25%.

- mobilization/demobilization
- materials
- earth work
- vegetation

Service Costs - The Federal Government pays 100 % of the cost for the following items:

- surveys
- design
- inspection
- contracting/contract administration

Depending on the contracting method, the sponsors may elect to carry out "installation" and/or "service" work that can be used toward their share of the project cost. Under some circumstances, if their share exceeds the required cost share, they may be reimbursed by NRCS for the excess.

Legal information associated with land rights, legal opinions and administrative fees for administration of locally led contracting activities do not qualify as in-kind contributions.

Communication Plan

The Communication Plan outlines responsibilities, timeframes, and methods for keeping the public informed about EWP activities and events.

Media Program

Goals

1. Provide uniform, consistent information to sponsors and the general public.
2. Provide landowners and sponsors information about how to apply for the program.
3. Keep decision-makers informed of progress.
4. Let taxpayers know how tax dollars are being spent.

Objectives

1. Prepare media list for affected counties.
2. Issue news releases/advisories based on milestones:

    a) Immediately following disaster to say assistance is available;
    b) Following completion of damage assessments to report number of sites and proposed actions;
    c) At completion of "urgent and compelling" repairs;
    d) When construction of regular repairs starts;

e) When construction is completed; and
f) Other releases as deemed necessary by local media contact.

3. Produce a photographic library of activities
4. Work with PAS to prepare a summary of EWP efforts for local sponsors, elected officials, partners, media, and residents using one or more of the following methods:

a) Tour;
b) PowerPoint or slide presentation for local groups;
c) Tabletop display;
d) Written report.

Key Messages

1) Role of NRCS technical expertise and financial assistance in disaster recovery; and
2) What can be accomplished/has been accomplished through EWP:
   Number of people benefited;
   Number of homes, businesses, community structures, roads, etc. protected;
   Value of services provided;
   Role of local sponsors in terms of their contributions;
   Environmental benefits such as clean water, fish habitat, etc.

Responsibilities

Public Affairs Specialist

The Public Affairs Specialist coordinates statewide efforts to inform the public about EWP activities.

Responsibilities include:

1. Serving as statewide contact for all media;
2. Providing liaison with the Virginia Department of Emergency Management communications team;
3. Keeping state and national NRCS managers advised of media activities;
4. Organizing information from the Field Coordinator for release to the public;
5. Arranging media interviews at the state level;
6. Preparing news releases, fact sheets, news advisories, and other material for local use;
7. Working with local contacts to identify human interest stories and success stories; and
8. Assisting local contacts with photography needs.

Field Coordinator

The Field Coordinator is responsible for receiving and compiling reports from local contacts and DSR Teams and providing information to the Public Affairs Specialist for use with the media.

Responsibilities include:

1. Providing regular reports to the PAS about the number and type of sites found in each county;
2. Making the local media contact person and the PAS aware of human interest stories and success stories; and
3. Coordinating use of magnetic EWP signs on vehicles and decal on hard hats.

Local Media Contact

One local media contact person will be identified for each affected county. This person will field inquiries about local conditions, provide interviews with the press, respond to calls from the general public, and provide liaison with the state Public Affairs Specialist.

Responsibilities include:

1. Serving as local point of contact for all media;
2. Issuing press releases and news advisories;
3. Arranging media interviews;
4. Providing daily updates to PAS on "urgent and compelling" sites;
5. Maintaining a file of newspaper clippings;
6. Coordinating file of digital/photographic images of "before" and "after" work;
7. Working with the sponsor to post EWP signs on sites under construction;
8. Assisting the PAS with coordination of media, legislative, and sponsor tours; and
9. Faxing copies of all news releases to the PAS along with the names of the newspaper, TV station, radio station, etc.

Supervisory District Conservationist

The Supervisory District Conservationist (SDC) will appoint a local media contact in each county. The local media contact will keep the SDC informed of media activities occurring within the county.

Floodplain Easements

Perpetual floodplain easements are another part of the EWP program. The purpose of the floodplain easement is to facilitate restoration of the natural floodplain hydrology. The required easement management will result in reduced downstream flood damage while promoting conservation of natural function and values of the floodplain. Floodplain easements must be defensible, supported by a DSR, and voluntarily offered. They must also meet the same requirements as recovery work unless specifically stated otherwise in policy

Private, public and tribal lands are eligible for easement consideration. All easements must include a permanent vegetative buffer adjacent to the watercourse. Sponsors are not needed to acquire easements; agreements can be developed directly with individual landowners.

Landowners will be compensated the least of the following values: 100 percent of the agricultural or other undeveloped/raw value of the land; the geographic cap where one is established ($1200/acre); or landowner offer. EWP funds may cover up to 100 percent of the cost for land treatment practices and all administrative, survey, title insurance, and other costs associated with establishing the easement. All easements must be economical, environmentally and socially defensible.

Emphasis for the purchase of floodplain easements will be on areas that receive repetitive flooding damages and occur in large, contiguous segments, which will provide the greatest benefit and promote the establishment of corridors. Virginia NRCS, in coordination with the State Technical Committee, has established a river system priority list for EWP easements.

Purchase of floodplain easements will follow the guidelines and policy as stated in the National Watershed Manual, 390-V Circular No. 4.

Training and Education

Training is planned in a two phased approach -- before an event and immediately after it.

Before an event: For NRCS personnel, direct training for the Emergency Response Plan will be provided at regular quarterly technical/program training sessions held for employees around the state. The initial training will be completed during the 6 months following finalization of the ERP. After this, annual training will be given. Agencies other than NRCS may be invited to participate in this training, as space is available. The roles of the local contact and local media contact will be addressed at this time.

Immediately after an event: When an emergency is declared, all NRCS employees working with damage assessments, design, and contracting shall meet for EWP update/refresher training and briefing. Local NRCS employees knowledgeable of the program will provide the training. Training will include overall EWP coordination within and outside NRCS, economic procedures, eligibility criteria, completing the DSR, cost estimates, permitting issues, land rights, GPS configuration, floodplain easements, and other items, to ensure consistency among teams. Training materials and a training outline will be developed as an appendix of this plan within 6 months of finalization of the ERP and will be updated periodically as procedures and policies change with time. The Public Affairs Specialist will provide training on the duties of the local media contact.

NRCS construction inspectors will be given additional training by the Contracting Officer and the engineering staff.

Final Reports and Follow-up

Within 60 days of the completion of the emergency work, the EWP program manager will submit a final report to NHQ. This report will follow the guidelines as stated in the National Emergency Watershed Protection Manual Part 503. This report may be distributed to other NRCS offices, State Technical Committee, congressional offices and interested partners. The project sponsors and appropriate agencies will be given the chance to comment on the effectiveness and delivery of the program. NRCS will conduct a follow-up tour for sponsors, environmental and permitting

agencies and other interested parties. NRCS will accept comments and entertain any suggestion that will improve the delivery and effectiveness of the EWP program and expand the use of floodplain easements.

Appendix A

Request for Assistance

Project Agreement

Figure A1. Sample letter requesting EWP assistance.

Date

State Conservationist
USDA, Natural Resources Conservation Service
(Street)
(City, State, Zip code)

Dear (State Conservationist):

We request Federal assistance under provisions of Section 216, Public Law 516, to restore damages sustained on (place) by storms of (date). (Describe location of disaster occurrence and scope of damage.) This work is needed to safeguard lives and property from an imminent hazard of floodwater and erosion.

We understand, as sponsors of an Emergency Watershed Protection project, our responsibilities will include acquiring landrights and permits needed to construct, and if required, to operate and maintain the proposed measures. We are prepared to provide local cost-share of 25 percent of the cost of the construction work, in dollars or in-kind services.

The names, addresses, and telephone numbers of the administrative and technical contact persons in our organization are as follows:

Please contact for any additional information needed.

Sincerely,

Title (President, Chair, etc.)

Figure A2. Sample Project Agreement - Federal Contract.

STATE _____
PROJECT _____

UNITED STATES DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

PROJECT AGREEMENT
FEDERAL CONTRACT

THIS AGREEMENT, made this _____ day of _____, 20__, by and between the _____ _____ (hereinafter called the Sponsor(s)) and the Natural Resources Conservation Service, United States Department of Agriculture (called NRCS).

WITNESSETH THAT:

WHEREAS, under the provisions of Section 216 of Public Law 81-516, Emergency Watershed Protection Program, and Title IV of the Agricultural Credit Act of 1978, Public Law 95-334, NRCS is authorized to assist the Sponsor in relieving hazards created by natural disasters that cause a sudden impairment of a watershed, and

WHEREAS, NRCS and the Sponsor(s) agree to install emergency watershed protection measures to relieve hazards and damages created by (hurricane, fires, floods) on _____, 20__.

NOW THEREFORE, in consideration of the premises and of the several promises to be faithfully performed by the parties hereto as set forth, the Sponsor and NRCS do hereby agree as follows:

A. It is agreed that the following-described work, including vegetation, is to be constructed at an estimated cost of $_____.

DSR No.	Description of Work	Estimated Cost
_____	_____	$_____
	_____	
_____	_____	$_____
	_____	
	_____	

B. The Sponsor will:

1. Provide ___ percent (cash) of the cost of constructing the emergency watershed protection measures described in Section A. This cost to the Sponsor is estimated to be $_____.

2. Provide in-kind contribution (list applicable in-kind services; i.e., to design the project, develop specifications and drawings, and inspect work performed).[1] The maximum value of in-kind contribution will not exceed ___ percent of the actual cost of constructing the works as described in Section A. The value of the in-kind contribution for the work described in Section A is described in Attachment 1 and is estimated to be $_____. The Sponsor will retain records to support costs incurred by the Sponsor equal to the amount of the in-kind contributions.

[1] Examples of in-kind contributions include DSR investigations, design, inspection, and contracting. This will be discussed between the sponsor and NRCS to determine the amount of work and the percentage of in-kind contribution will be credited to the sponsor.

3. Complete all in-kind work within ____ days of signing this agreement. If in-kind work is not completed on time, NRCS may bill the sponsor the estimated cost of the work. An extension may be granted due to conditions outside the control of the Sponsor.

4. The following individual is designated as the liaison between the Sponsor and NRCS.

_____
(Name)

_____
(Address)

_____
(Phone)

5. Provide certification that real property rights have been obtained for installation of emergency watershed protection measures prior to advertising. Certification will be provided on Form SCS-ADS-78, Assurances Relating to Real Property Acquisition, as amended (no attorney's opinion is required on EWP work unless structural measures are involved).

6. Review and approve plans for constructing the emergency watershed protection measures described in Section A.

7. Accept all financial and other responsibility for excess costs resulting from their failure to obtain, or their delay in obtaining, adequate land and water rights, permits, and licenses needed for the emergency watershed protection measures described in Section A.

8. Make payment to NRCS upon receipt of billings as outlined in paragraph C.5. Payments must be received within 30 calendar days from the date of billing.

9. Comply with the applicable requirements in Attachment A to this agreement.

10. Upon acceptance of work from the contractor, assume responsibility for operation and maintenance, if applicable.

C. NRCS will:

1. Provide __ percent of the cost of the emergency watershed protection measures described in Section A. This cost to NRCS is estimated to be $_____.

2. Provide the value of the sponsor in-kind contribution not to exceed ___ percent of the *actual* cost of constructing the emergency watershed protection measures described in Section A.

3. Contract for the emergency watershed protection measures described in Section A in accordance with Federal contracting procedures.

4. Make changes in the work described in Section A as mutually agreed upon with the Sponsor, and modify the contract accordingly.

5. Provide authorized technical services, including but not limited to obtaining basic information; preparation of drawings, design, and specifications; and performance of layout, inspection services, and quality control during construction.

6. Arrange for and conduct final inspection of the completed emergency watershed protection measures with the Sponsor to determine whether all work has been performed in accordance with the contractual requirements. Accept work from the contractor and notify the Sponsor of acceptance.

7. Bill the Sponsor for __ percent of the work described in Section A.

D. It is mutually agreed that:

1. The furnishing of financial and other assistance by NRCS is contingent on the availability of funds appropriated by Congress from which payment may be made and shall not obligate the Service upon failure of the Congress to so appropriate.

2. NRCS may terminate this agreement in whole or in part when it is determined by NRCS that the Sponsor has failed to comply with any of the conditions of this agreement. NRCS shall promptly notify the Sponsor in writing of the determination, reasons for the termination, together with the effective date. Payments made by or recoveries made by NRCS under this termination shall be in accordance with the legal rights and liabilities of NRCS and the Sponsor.

3. This agreement may be temporarily suspended by NRCS if it determines that corrective action by the Sponsor is needed to meet the provisions of this agreement. Further, NRCS may suspend this agreement when it is evident that a termination is pending.

4. This agreement is effective the date it is fully executed by all parties to the agreement. It may be renegotiated, amended, extended, or modified by a written amendment as mutually agreed by both parties.

5. In the event of default, any additional funds required to ensure completion of the job will be provided in the same ratio as construction funds are contributed by the parties under the terms of this agreement; and any excess costs collected from the defaulting contractor or their surety are to be prorated between the Sponsor and NRCS under the same ratio as construction funds are contributed under the terms of this agreement.

7. Activities conducted under this agreement will be in compliance with the nondiscrimination provisions as contained in the Titles VI and VII of the Civil Rights Act of 1964, as amended, the Civil Rights Restoration Act of 1987 (Public Law 100-259), and other nondiscrimination statutes, namely Section 504 of the Rehabilitation Act of 1973, Title IX of the Education Amendments of 1972, the Age Discrimination Act of 1975, and in accordance with regulations of the Secretary of Agriculture (7 CFR 15, Subparts A and B) which provide that no person in the United States shall, on the grounds of race, color, national origin, age, sex, religion, marital status, or handicap be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity receiving federal financial assistance from the Department of Agriculture or any agency thereof.

SPONSOR

By: _____

Title: _____

Date: _____

This action authorized at an official meeting of the _____ Sponsor on the _____ day of _____, 20__, at _____, State of _____.

_____
(Signature)

_____
(Title)

UNITED STATES DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

By: _____

Title: _____

Date: _____

Figure A3. Landrights Permission Sheet

U.S. Department of Agriculture
Soil Conservation Service

SCS-ADS-78
5-88

ASSURANCES RELATING TO REAL PROPERTY ACQUISITION

A. PURPOSE — This form is to be used by sponsor(s) to provide the assurances to the Soil Conservation Service of the U.S. Department of Agriculture which is required in connection with the installation of project measures which involve Federal financial assistance furnished by the Soil Conservation Service.

B. PROJECT MEASURES COVERED —

Name of project _____

Identity of improvement or development _____

Location _____

C. REAL PROPERTY ACQUISITION ASSURANCE —

This assurance is applicable if real property interests were acquired for the installation of project measures, and/or if persons, businesses, or farm operations were displaced as a result of such installation; *and* this assurance was not previously provided for in the watershed, project measure, or other type of plan.

If this assurance was not previously provided, the undersigned sponsor(s) hereby assures they have complied, to the extent practicable under State law, with the requirements of the Uniform Relocation Assistance and Real Property Acquisition Policies Act (42 U.S.C. 4601-4655), as implemented in 7 C.F.R. Part 21. Any exceptions taken from the real property acquisition requirements under the authority of 42 U.S.C. 4655 because of State law have been or is hereby furnished to the Soil Conservation Service along with the opinion of the Chief Legal Officer of the State containing a full discussion of the facts and law furnished.

D. ASSURANCE OF ADEQUACY OF REAL PROPERTY RIGHTS —

The undersigned sponsor(s) hereby assures that adequate real property rights and interests, water rights if applicable, permits and licenses required by Federal, State, and local law, ordinance or regulation, and related actions have been taken to obtain the legal right to install, operate, maintain, and inspect the above-described project measures, except for structures or improvements that are to be removed, relocated, modified, or salvaged before and/or during the installation process.

This assurance is given with the knowledge that sponsor(s) are responsible for any excess costs or other consequences in the event the real property rights are found to be inadequate during the installation process.

Furthermore, this assurance is supported by an attorney's opinion attached hereto that certifies an examination of the real property instruments and files was made and they were found to provide adequate title, right, permission and authority for the purpose(s) for which the property was acquired.

If any of the real property rights or interests were obtained by condemnation (eminent domain) proceedings, sponsor(s) further assure and agree to prosecute the proceedings to a final conclusion and pay such damages as awarded by the court.

_____
(Name of Sponsor)

By: _____

Title: _____

Date: _____

This action authorized
at an official meeting _____

_____ on _____

day of _____, 19_____,

at _____

State of _____

Attest: _____
(Name)

_____
(Title)

_____
(Name of Sponsor)

By: _____

Title: _____

Date: _____

This action authorized
at an official meeting _____

_____ on _____

day of _____, 19_____,

at _____

State of _____

Attest: _____
(Name)

_____
(Title)

PERMIT FOR EMERGENCY WATERSHED PROTECTION (EWP) PROGRAM

The undersigned landowners hereby grant permission to the _____ (county or city) and/or their agents to enter upon our land for the purpose of repairing the flood damage on _____ (stream channel or watershed).

This permit included the right to spread soil, remove and dispose of debris, install needed measures, seed and mulch, and perform similar emergency watershed protection work associated with the flood of _____ (date or event). It is understood that debris (soil, rocks, stumps, trees, etc.) may be hauled away from my property to other locations for disposal without receiving any compensation.

This permit also includes the right to ingress and egress on the land for the purpose of maintaining the emergency works for the period of one year from the date of completion.

It is understood that I am participating in a stream restoration program, not a flood prevention program. I understand that the stream will be restored to its pre-flood channel capacity, not necessarily widened, deepened and straightened.

Signed	Date	Signed	Date
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

Appendix B

DSR Example

DSR NO. BED 01 1-2

Form ____-PDM-4
USDA-Natural Resources Conservation Service
Emergency Watershed Protection

Eligible YES X NO ___
Approved YES X NO ___
Estimated Cost $ 34,000

DAMAGE SURVEY REPORT (DSR)

****

BEDFORD COUNTY (Applicant Name)

SHEEP CREEK (Site Name or Watershed)

123 MAIN STR. BEDFORD VA 12345 (Address)

BEDFORD (County)

(Priority No)

Lat _____ Long _____ Sect ___ Twp ____ Range _____ Cong Dist: ___

SEE MARKER SHEET

****

Drainage Name: SHEEP CREEK **Reach:** _____

Describe Damage: COBBLE BLOCKAGE OVERLAND FLOW MISSING A HOME. NEW CUT CHANNEL THREATING ROAD AND BRIDGE ABUTMENTS

****

EVALUATION FACTORS	**YES**	**NO**	**REMARKS**
Threat to Life and/or Property	X		URGENT + COMPELLING - SITE
New Hazard Created by this Event	X		
Multiple Beneficiaries	X		
Limited Resource Area		X	
Economically Defensible (From Page 2)	X		
Socially Defensible (From Page 3)	X		
Environmentally Defensible (From Page 4)	X		
Overall Defensible	X		
Technically Sound (From Page 5)	X		

****

ALTERNATIVE CONSIDERED

1. Floodplain Easements. LAND OWNER NOT INTERESTED
2. Nonstructural Measures. COBBLE AND DEBRIS REMOVAL
3. Structural Measures. ROOT WADS, TOE ARMOR + BIOENG LFC
4. Other (Describe briefly) GABIONS 'RIPRAP
5. No Action

****

PROPOSED TREATMENT

Describe The Selected Alternative REMOVE COBBLE ESTABLISH GEOMORPHIC CHANNEL, INSTALL ROOT WADS AND FILL NEW CUT CHANNEL

Construction Cost of Emergency Work $ 34,000

****

REVIEW/APPROVAL:

_____ **State Conservationist Representative**

_____ **Date**

NOTE: DSR pages 2-6 are required to support the decisions recorded on this summary page.

DSR (page 2) DSR No: BED01 1 of 2

ECONOMIC EVALUATION

County: BEDFORD Date: 11-18-01 Completed By: TEAM 1

****

Properties	Replace cost or Value ($)	Repair cost or Damage	Damage Factor	Damage Reduction
1. Properties Protected (private)				
HOME	93,000		70	65,100
CROPLAND 1AC	3,000		20	600
2. Properties Protected (public)				
SR 680	25,000		40	10,000
BRIDGE	50,000		60	30,000
3. Business Losses				
NONE				
4. Other				
NONE				

TOTAL DAMAGE REDUCTION $ _____

REMARKS: WATER REACHED THE FIRST FLOOR OF HOME

DSR (page 3) DSR No: BED-01-102

SOCIAL EVALUATION

County: BEDFORD Date: 11-19-01 Compiled By: Team 1

****

IMPACTS ON:	Yes	No	Remarks
Schools		X	
Day Care Facilities		X	
Hospital/Nursing Home		X	
Other Group Facilities		X	
Emergency Services	X		ROAD CLOSED DUE TO HIGH WATER
Handicapped Individuals	X		HOME OWNER CONFINED TO W/C
Limited Resource Individuals		X	
Quality of life	X		REMOVES DEBRIS FROM VIEW
			~~REGRADE~~ REVEGETATE BARE AREAS
OTHER EFFECTS:			
Loss of Home		X	
Loss of Utilities	X		TV CABLE + PHONE OUT
Loss of Life		X	

BENEFICIARIES:

(Information is available from the U.S. Census Bureau.)

Race	Number	Est. Median House Value	Est. Subgroup Per Capita Income
White	6	93,000	
African-American			
Asian			
American Indian			
Ethnicity (Hispanic)			

Has NRCS taken the appropriate steps to ensure that all segments of the affected population have been informed of the proposed measure(s) or its possible effects?

YES

REMARKS: HOME OWNER TRAPPED IN HOME FOR 3 HOURS UNTIL EVACUATED BY FIRE DEPT.

DSR (page 4) **DSR No:** _____

ENVIRONMENTAL EVALUATION 1/

County: BRADFORD Date: 11-19-01 Compiled By: Team 1

****

ENVIRONMENTAL FACTORS	EFFECT 2/ Without Project	Short Term	Long Term	REMARKS 3/
* PRIME/UNIQUE FARMLAND	-	-	+	REMOVE DEBRIS FROM PFL
CHANGE IN LAND USE (What is change?)	-	O	+	DEBRIS REMOVAL WILL ALLOW FOR CROP PROD, AGAIN
SOIL EROSION (Quantify if possible)	-	-	+	STABLE BANKS NO EROSION FROM OUT OF BANK FLOW
RIPARIAN AREAS	-	+	+	
SOIL CONDITION (Compaction, salinity, fertility, etc.)	-	+	+	SATURATED FLOOD PLAIN WILL DRY OUT
SURFACE WATER QUANTITY	O	O	O	
COASTAL ZONE MGT AREA	N/A	N/A	N/A	
WILD AND SCENIC RIVERS	N/A	N/A	N/A	
SPECIAL AQUATIC AREAS	N/A	N/A	N/A	
AIR QUALITY	O	-	O	
VEGETATION ALTERATION (Landscape What is change?)	O	O	O	
* FLOODPLAIN MANAGEMENT	-	O	O	HOME STILL IN FP
* WETLANDS - (Includes riparian)	N/A	N/A	N/A	
FISH AND WILDLIFE HABITAT	-	-	+	ROOT WADS, STABLE BANK LFC
* THREATENED OR ENDANGERE SPECIES - plants or animals	N/A	N/A	N/A	CHECKED MAPS
* CULTURAL RESOURCES	O	O	O	NONE NOTE
AESTHETICS (Appearance of)	-	-	+	
NATURAL AREAS	N/A	N/A	N/A	
OTHER CHEMICAL STORAGE	-	+	+	WILL MOVE OUT OF FP

1/ Use for individual practices, RMS, conservation treatment unit, or EWP, RC&D, small watershed projects (Refer to GI 410).

2/ CODE ITEMS: (+) Beneficial Effect, (O) No Effect, (-) Adverse Effect, (N/A) Not Applicable. Without Project = WI effects if no projects action? Short Term = Installation period. Long Term = Period through duration of intended use life project or restore to pre-condition. Assess off-site or cumulative impacts as wells s on-site.

3/ Explain all + or - effects and note if on-site and/or off-site.

(*) CRITICAL ENVIRONMENTAL FACTOR addressed in Federal Regulations.

DSR (page 5) DSR No: BED01-1, 2,

ENGINEER'S COST ESTIMATE

County: BEDFORD Date: 11-19-01 Compiled By: TEAM 1

Measure Category	Planned Measures	Units	Units Needed	Construction Costs
I. Area devoid vegetation (gully(ies) small land-slides, burns, etc.)	Erosion Control			
	___ _____	_____	_____	_____
	___ _____	_____	_____	_____
	___ _____	_____	_____	_____
	Grade Stab. Structure:			
	___ New	Number	_____	_____
	___ Repair	Number	_____	_____
	Re-vegetation:			
	___ Aerial seeding	Acre	_____	_____
	___ Drill Seeding	Acre	_____	_____
	X Hand planting	Acre	1.5	6000
	Subtotal - Construction Cost			$ 6,000
II. Debris or Sed. Control	Basin or Dam			
	___ Construct (new)	Number	_____	_____
	___ Cleanout	Number	_____	_____
	___ Repair	Number	_____	_____
	___ Log Boom	Number	_____	_____
	___ Sediment Trap	Number	_____	_____
	___ Trash Rack	Number	_____	_____
	Subtotal - Construction Cost			$_____
III. Levee, Dike, Dune	___ Construct (new)	Feet	_____	_____
	___ Repair	Feet	_____	_____
	___ Re-vegetate	Acre	_____	_____
	Subtotal - Construction Cost			$_____
V. Stream or Surface Drain	X Bank Stabilization	Feet	225	8000
	X Debris or sediment removal	Feet	570	20,000
	Grade Stab. Structure:			
	___ New	Number	_____	_____
	___ Repair	Number	_____	_____
	___ Reshape	Acre	_____	_____
	___ Re-vegetate channel bank	Acre	_____	_____
	Subtotal - Construction Cost			$ 28,000
	TOTAL CONSTRUCTION COST			$ 34,000

DSR (page 6) **DSR No:** BED 01-1+2

****

TEAM RECOMMENDATIONS:

Comments: URGENT + COMPELLING WORK NEEDS TO BE COMPLETED ASAP.

SINCE THE NEW CHANNEL IS CARRYING THE STREAM FLOW SITE 2 NEEDS TO BE COMPLETED FIRST TO OPRAITHE ORIGINAL CHANNEL PRIOR TO FILLING THE NEW CHANNEL

VDOT HAS INSTALLED RIP RAP AND REMOVED DEBRIS ON R/W

****

CERTIFICATION:

The Emergency work is X is not ____economically, socially, and environmentally, defensible and approval is X is not _____recommended.

Team Members:	Name (signatures)	Discipline
	HUGHSTON	ENG
	FRAYMAN	NRS CON
	MYERS	BIOLOGIST
	HOHN	VDGIF BIOLOGIST
	WATKINSON	VMRC

Date: 11-14-01

****

CONCURRENCE:

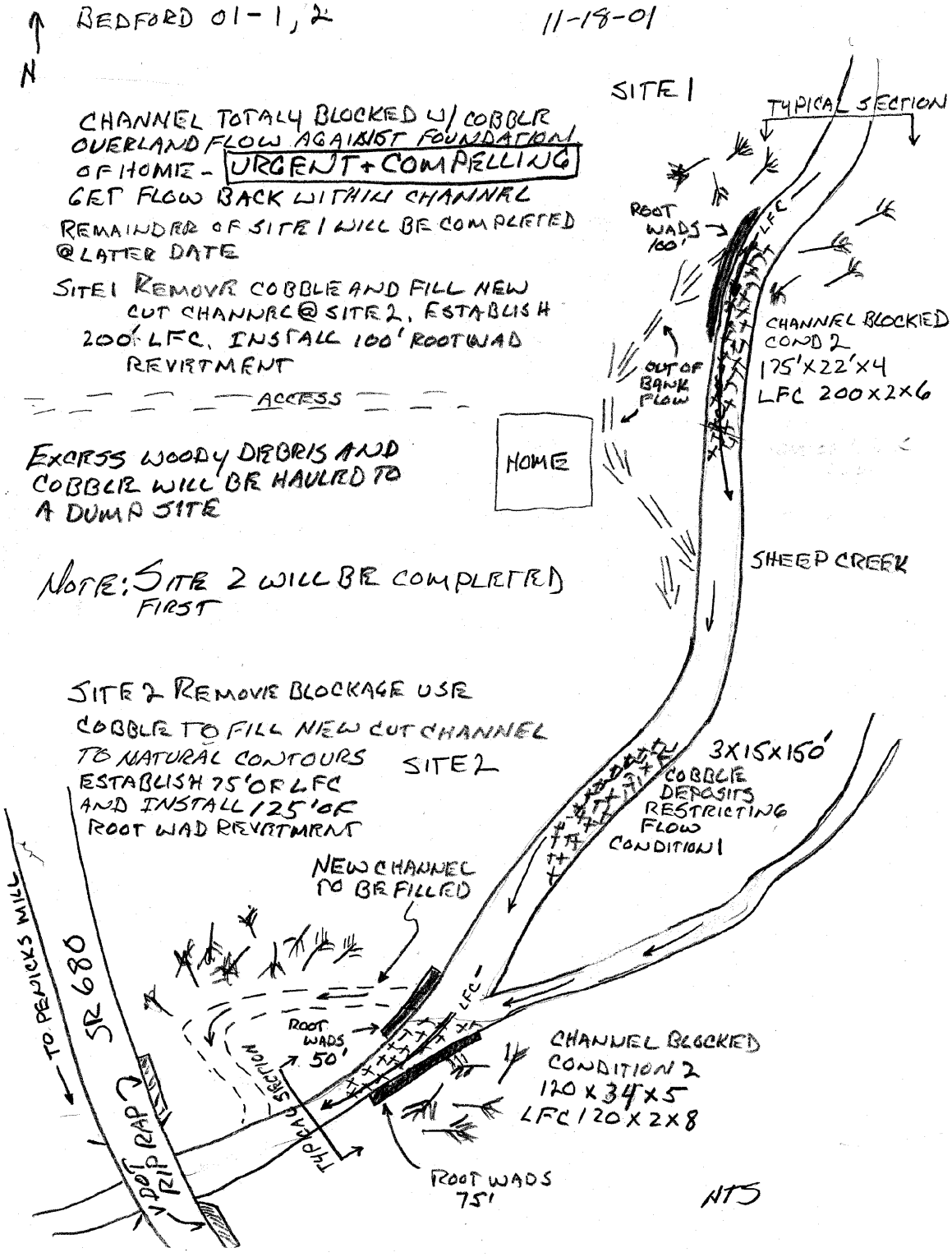
Sponsor Representative **NRCS Representative**

****

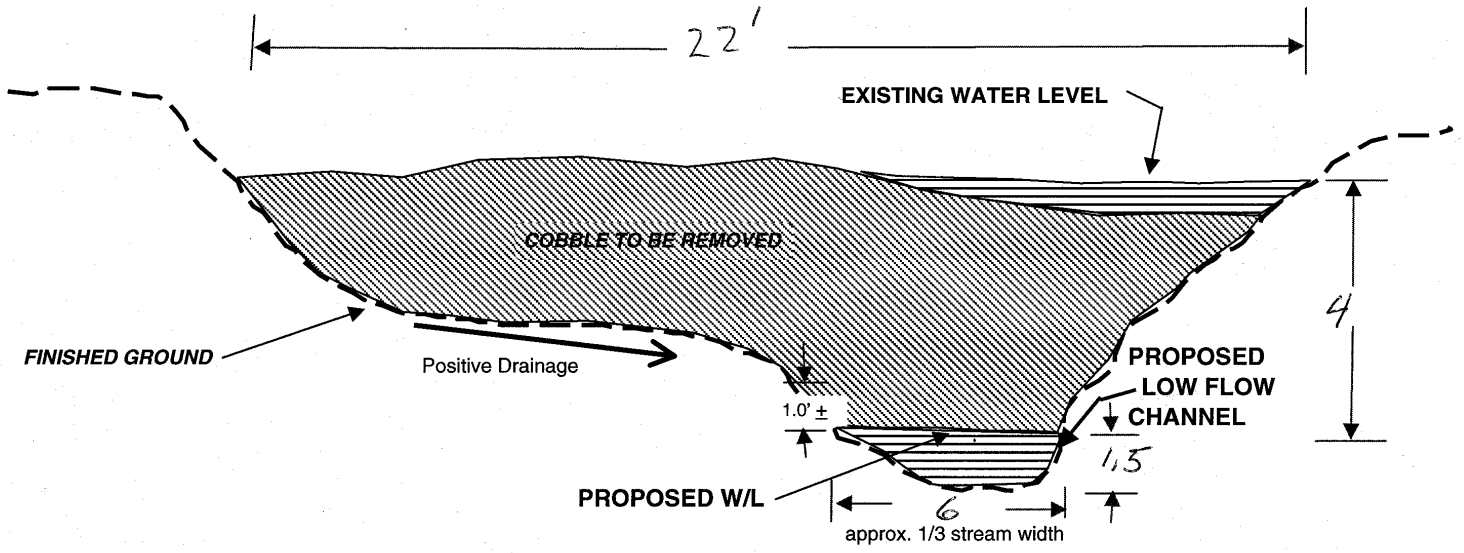
ATTACHMENTS: A. Location Map ✓

B. Site Plan ✓ SKETCH

1/ Detailed information for determining the social effects can be found in NRCS Social Assessments series 420-12 "Social Assessment Procedures in Natural Resource Planning (Draft Guidelines)" January 1981 (22). Detailed information for determining the environmental effects can be found in NRCS "Economic and Environmental Principles and Guidelines for Water and Related Implementation Studies" (P&G), March 1983.


BEDFORD 01-1, 2
11-18-01
N
SITE 1
TYPICAL SECTION
CHANNEL TOTALY BLOCKED W/ COBBLE
OVERLAND FLOW AGAINST FOUNDATION
OF HOME - URGENT + COMPELLING
GET FLOW BACK WITHIN CHANNAL
REMAINDER OF SITE 1 WILL BE COMPLETED
@ LATTER DATE
SITE 1 REMOVE COBBLE AND FILL NEW
CUT CHANNEL @ SITE 2, ESTABLISH
200' LFC, INSTALL 100' ROOTWAD
REVIRTMENT
ACCESS
EXCESS WOODY DEBRIS AND
COBBLE WILL BE HAULED TO
A DUMP SITE
HOME
NOTE: SITE 2 WILL BE COMPLETED
FIRST
ROOT WADS 100'
LFC
CHANNEL BLOCKED
COND 2
175'X22'X4
LFC 200X2X6
OUT OF BANK FLOW
SHEEP CREEK
SITE 2 REMOVE BLOCKAGE USE
COBBLE TO FILL NEW CUT CHANNEL
TO NATURAL CONTOURS
ESTABLISH 75' OF LFC
AND INSTALL 125' OF
ROOT WAD REVIRTMENT
SITE 2
3X15X150'
COBBLE
DEPOSITS
RESTRICTING
FLOW
CONDITION 1
NEW CHANNEL
TO BE FILLED
TO PEDICKS MILL
SR 680
ROOT WADS 50'
LFC
CHANNEL BLOCKED
CONDITION 2
120 X 34 X 5
LFC 120 X 2 X 8
TYP RIP RAP
TYP SECTION
ROOT WADS 75'
NTS

CONDITION # 2 PERCHED STREAM BOTTOM W/NO LOW FLOW CHANNEL



CONDITION - perched stream bottom with no low flow channel.

TREATMENT - establish a low flow channel and remove excess cobble.

EXAMPLE

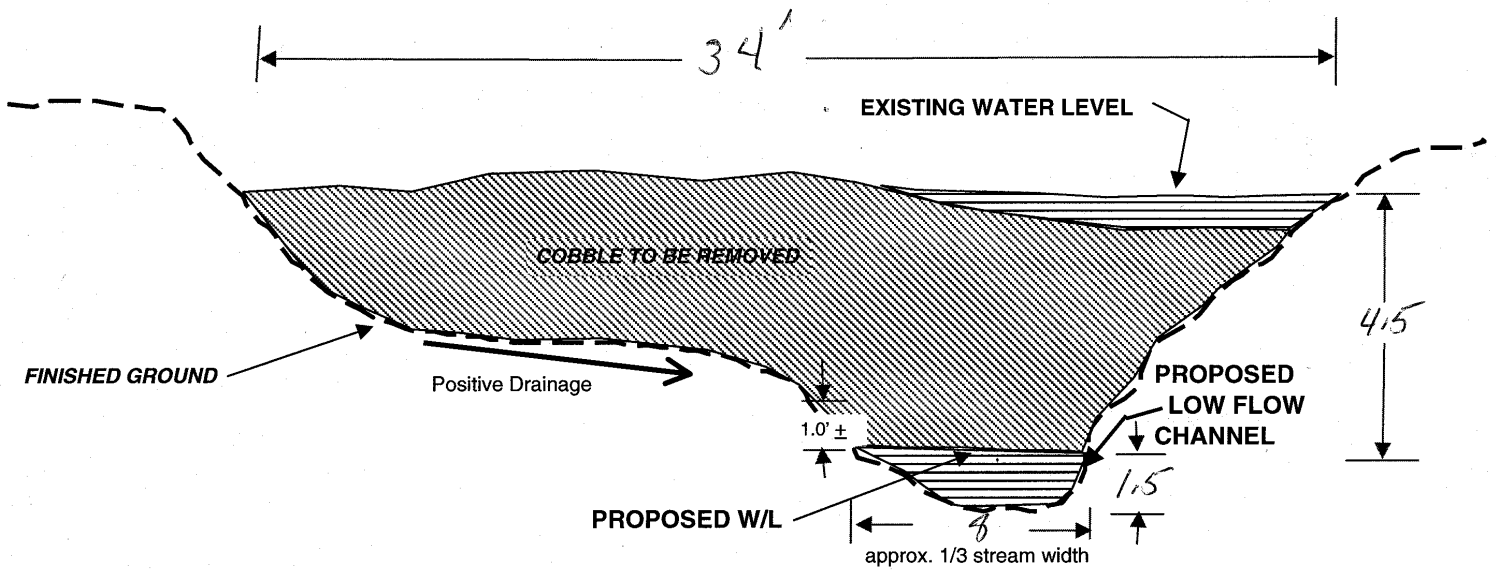
Cross Sections will match the existing natural stable stream Cross-Sections up and down stream of the proposed work area.

The finished channel bottom will be reconstructed to the typical field cross section, with a uniform gradient between the work limits.

NOT TO SCALE

BEDFORD County, VIRGINIA EWP TYPICAL SECTION DETAIL DSR No. _____		
USDA/NATURAL RESOURCES CONSERVATION SERVICE		
B.Bear 8/31/01 Drawn/design by Date	BEDFORD 01-1	
	page no.	drawing no. NRCS-___-VA-___

CONDITION # 2 PERCHED STREAM BOTTOM W/NO LOW FLOW CHANNEL



CONDITION - perched stream bottom with no low flow channel.

TREATMENT - establish a low flow channel and remove excess cobble.

EXAMPLE

Cross Sections will match the existing natural stable stream Cross-Sections up and down stream of the proposed work area.

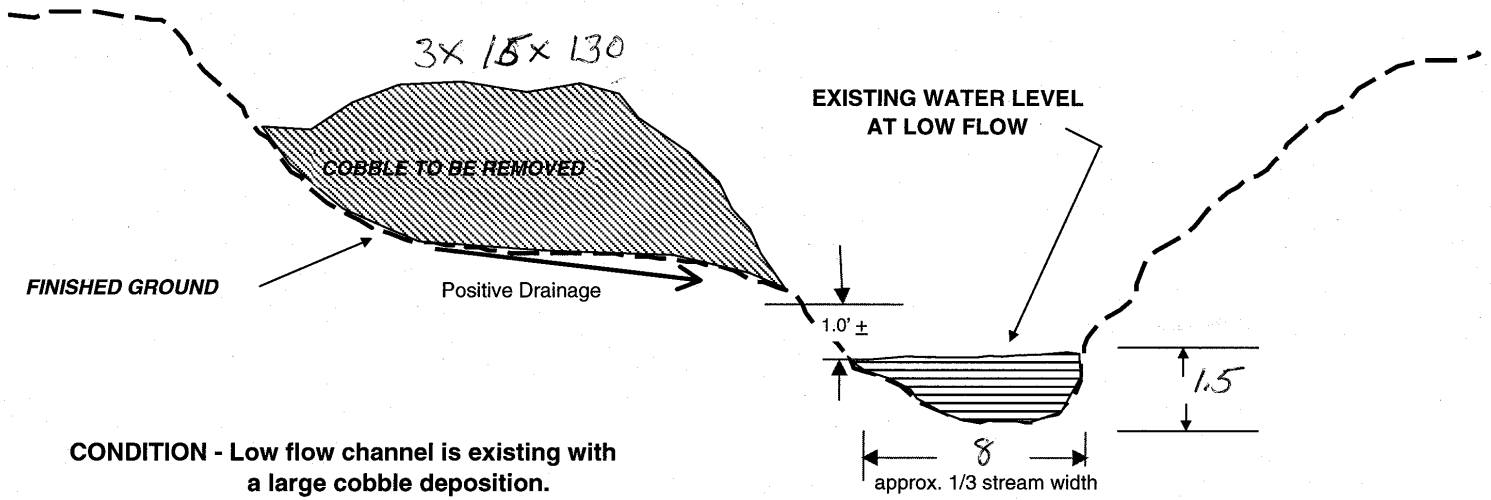
The finished channel bottom will be reconstructed to the typical field cross section, with a uniform gradient between the work limits.

NOT TO SCALE

BEDFORD County, VIRGINIA EWP TYPICAL SECTION DETAIL DSR No. _____		
USDA/NATURAL RESOURCES CONSERVATION SERVICE		
B.Bear Drawn/design by	8/31/01 Date	BEDFORD 01-2
	page no.	drawing no. NRCS-___-VA-___

CONDITION #1 COBBLE REMOVAL ONLY WITH EXISTING LOW FLOW

(NO INSTREAM WORK)



CONDITION - Low flow channel is existing with a large cobble deposition.

TREATMENT - Remove cobble to within 1.0' of the water level, no work in low flow channel.

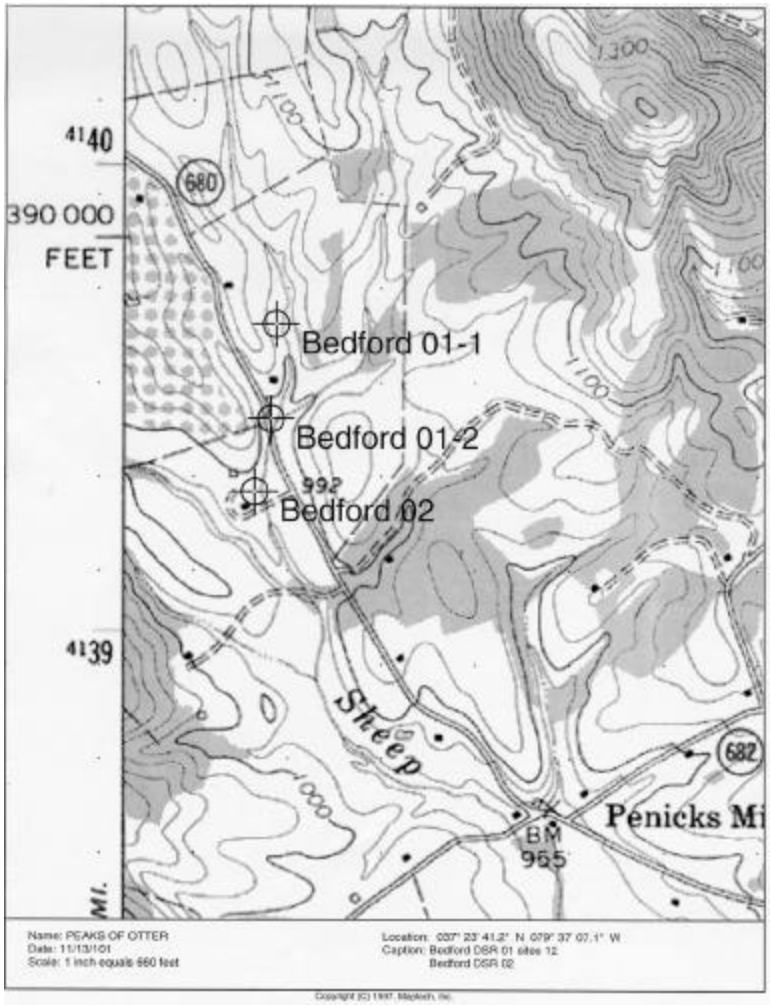
EXAMPLE

Cross Sections will match the existing natural stable stream Cross-Sections up and down stream of the proposed work area.

The finished channel bottom will be reconstructed to the typical field cross section, with a uniform gradient between the work limits.

NOT TO SCALE

BRADFORD County, VIRGINIA EWP TYPICAL SECTION DETAIL DSR No. _____		
USDA/NATURAL RESOURCES CONSERVATION SERVICE		
B.Bear Drawn/design by	8/31/01 Date	BRDFORD 01 - 2
	page no.	drawing no. NRCS-___-VA-___



Markers

Name: Bedford 01-1

Short Name: Bdfrd0

Coordinates: 037° 23' 50.7" N, 079° 37' 16.2" W

Name: Bedford 01-2

Short Name: Bdfrd0

Coordinates: 037° 23' 44.1" N, 079° 37' 16.7" W

Name: Bedford 02

Short Name: Bdfrd0

Coordinates: 037° 23' 39.0" N, 079° 37' 18.1" W

Standard Drawings

Figure B1 -Site Sketch

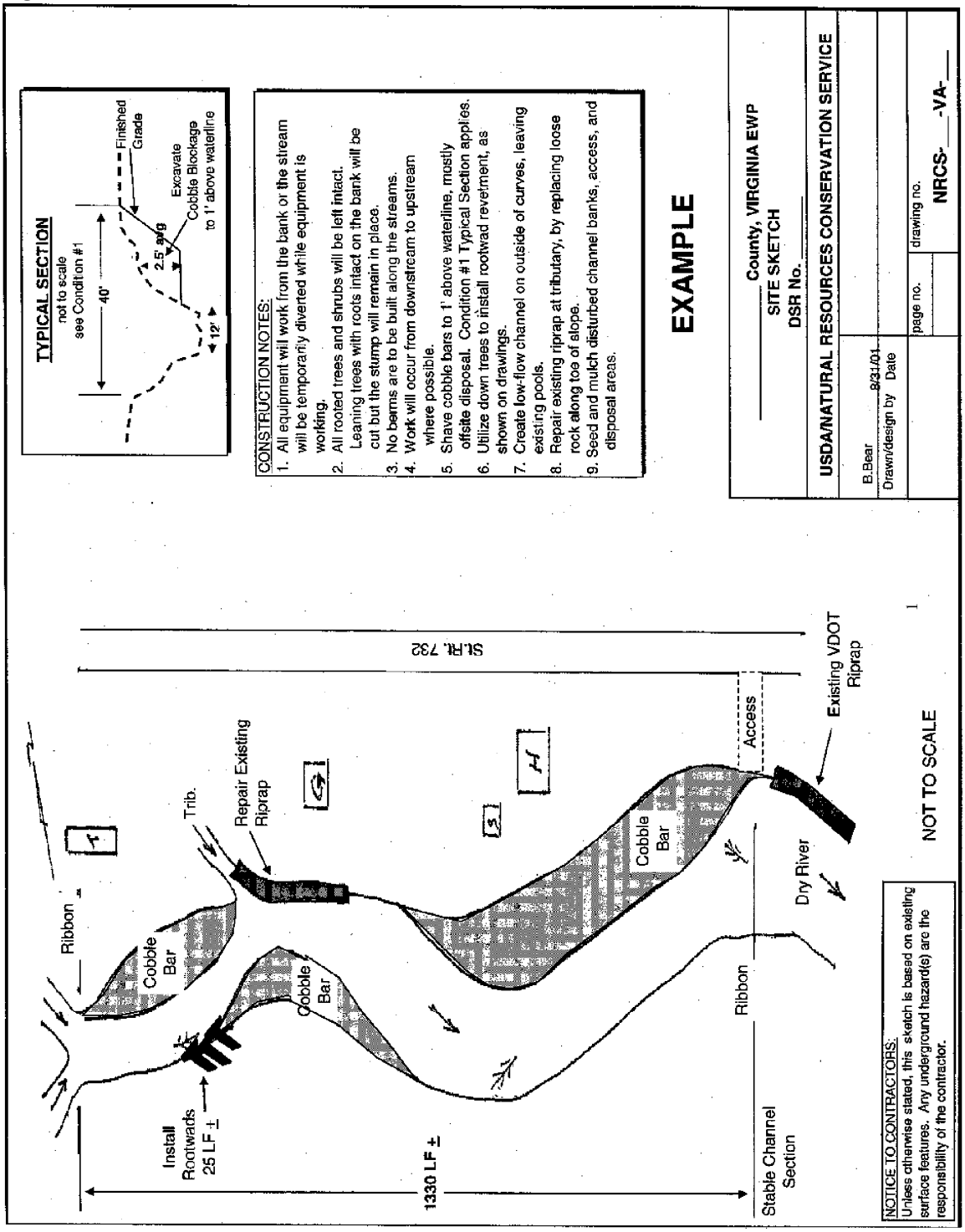
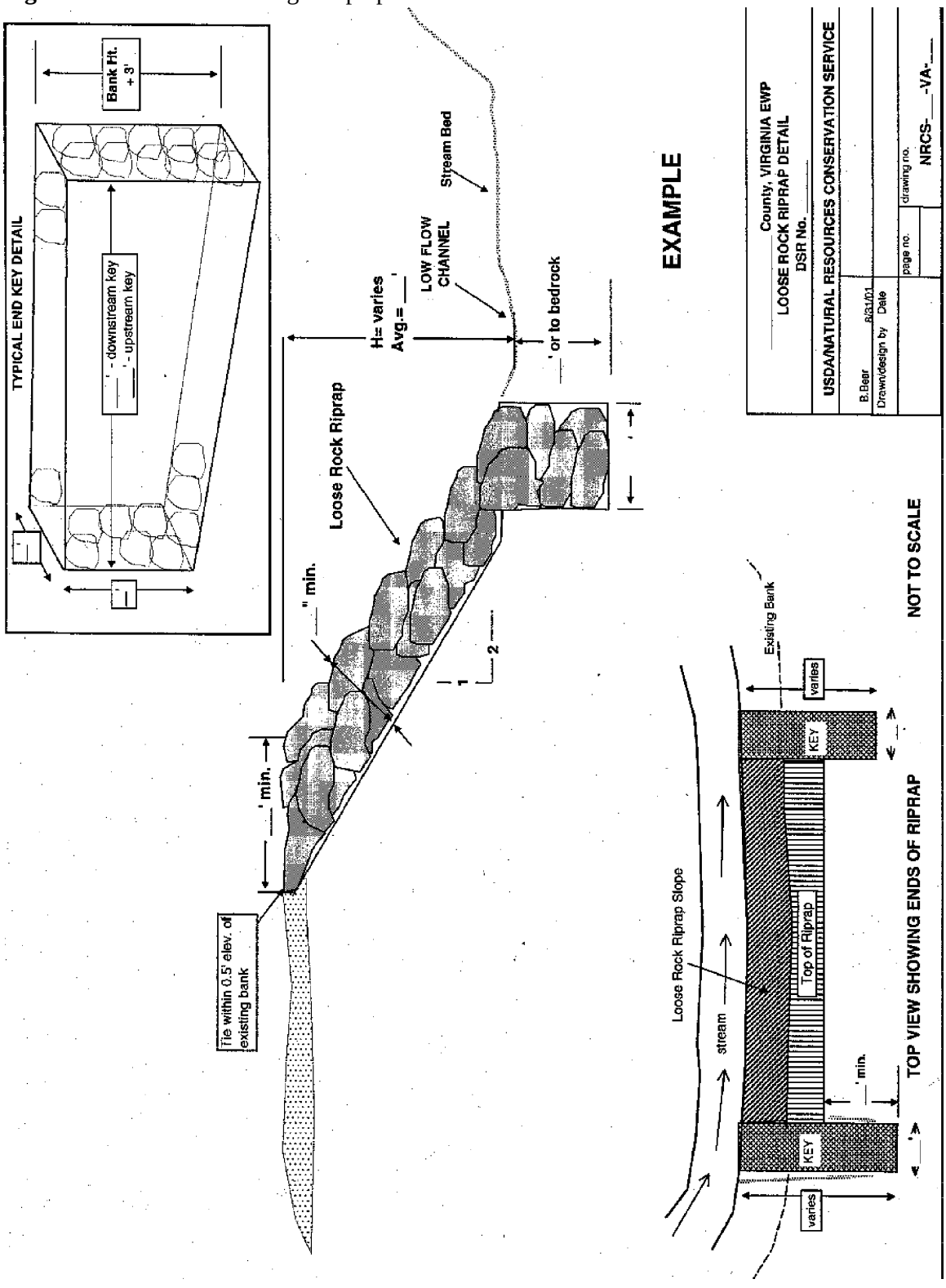
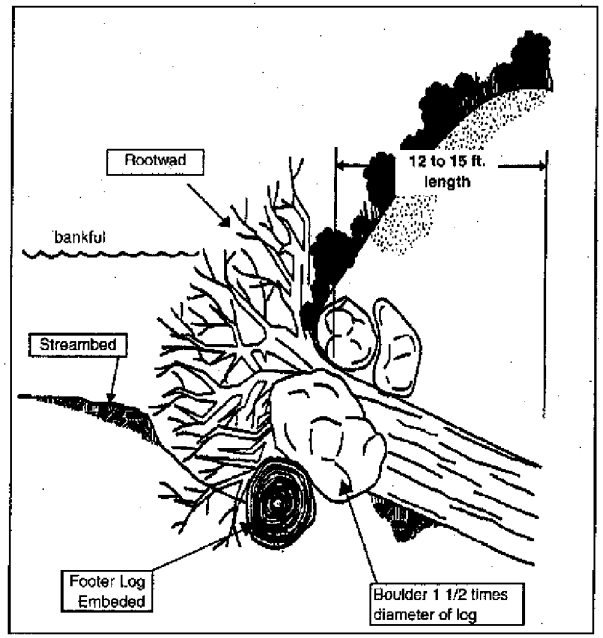
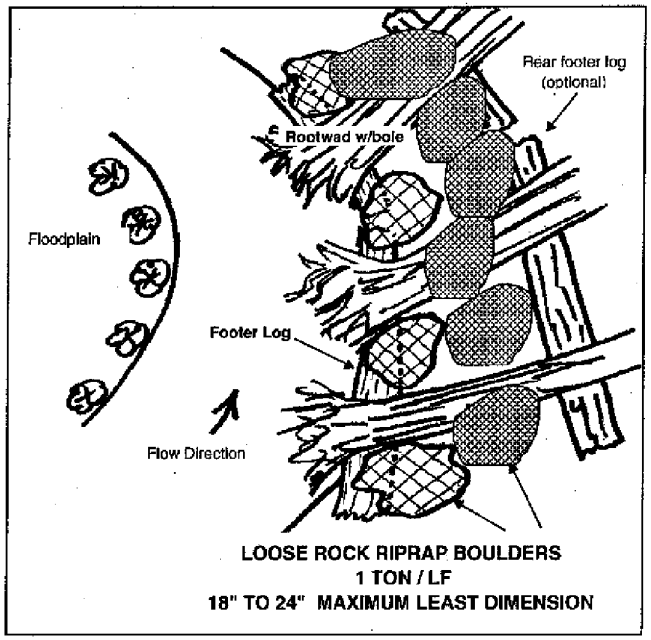


Figure B2. Standard Drawing – Riprap







CONSTRUCTION NOTES:

1. The footer log is placed where the toe of slope will be. Footer logs shall be firmly pressed into the streambed so that water is not flowing under it. A rear footer log can be used to make the rootwad tip toward the water more. If a low flow channel is to be created, it will be done prior to beginning rootwad installation.
2. The bole of the tree will rest on the footer log. The lower part of the rootwad will be in the water where it can deflect water and create habitat.
3. Rootwads will overlap slightly with the upstream rootwad to the outside of the downstream roodwad (ie. shingle effect).
4. If large rocks are available, place them between the rootwads prior to backfill, in addition to the required loose rock riprap.

EXAMPLE

_____ County, VIRGINIA EWP ROOT WAD REVETMENT DETAIL DSR No. _____		
USDA/NATURAL RESOURCES CONSERVATION SERVICE		
B.Bear 8/31/01 Drawn/design by Date		
	page no.	drawing no. NRCS-___-VA-___

Figure B3. Standard Drawing – Rootwads.

Figure B4. Standard Drawing – Rock vortex weir.

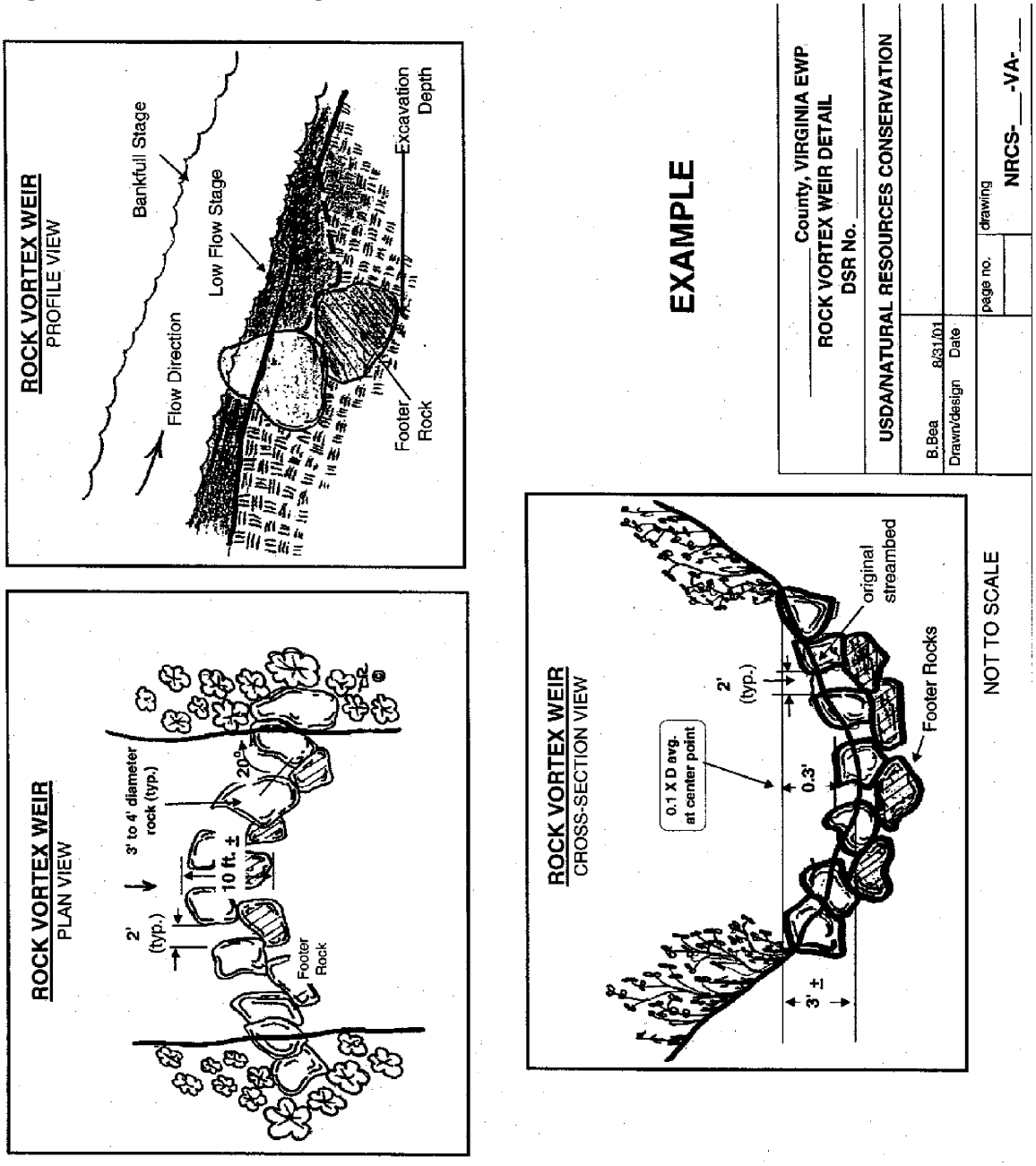


Figure B5. Standard Drawing – Gabions.

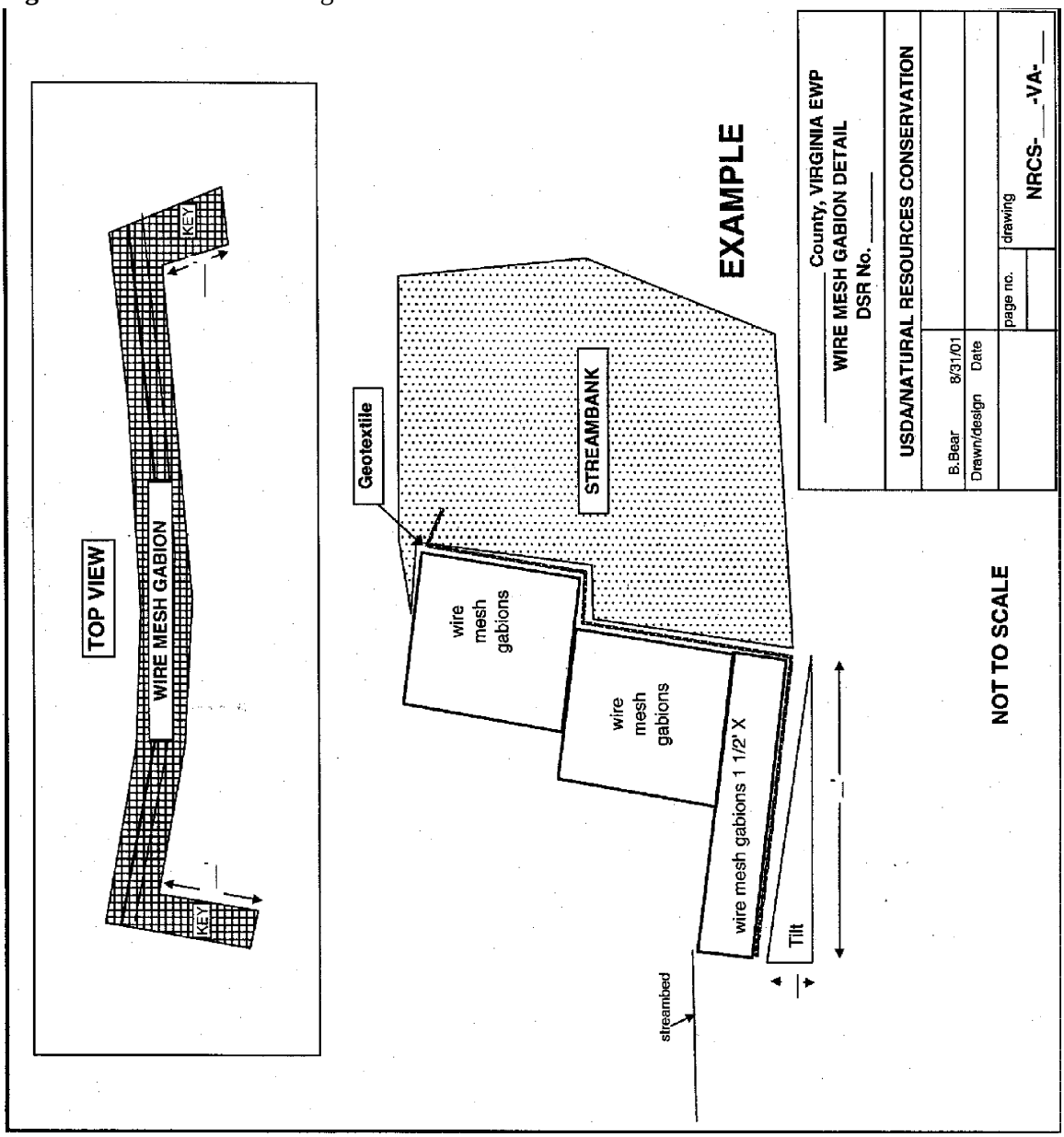


Figure B6. Standard Drawing – Stream Cross-section #1.

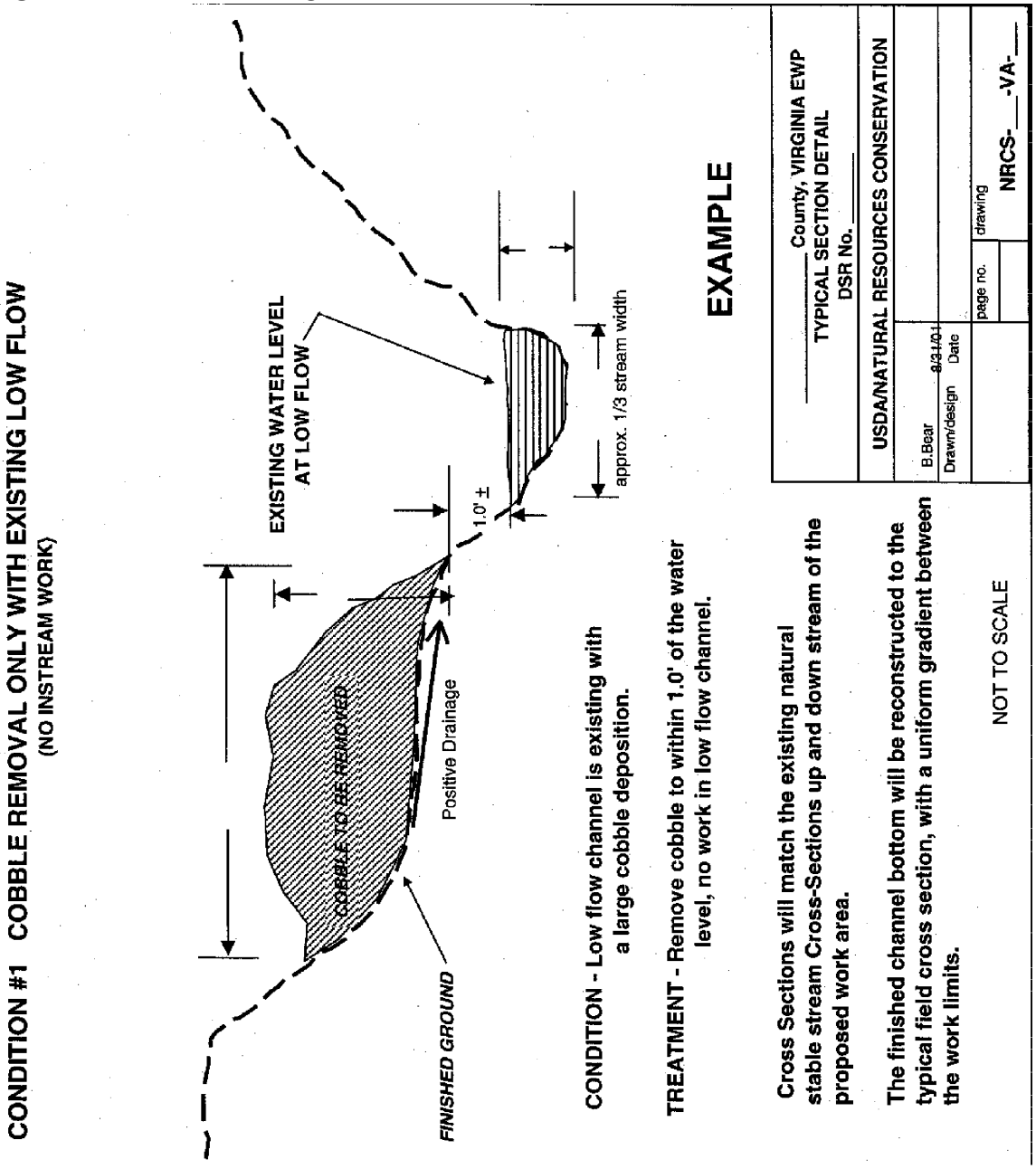
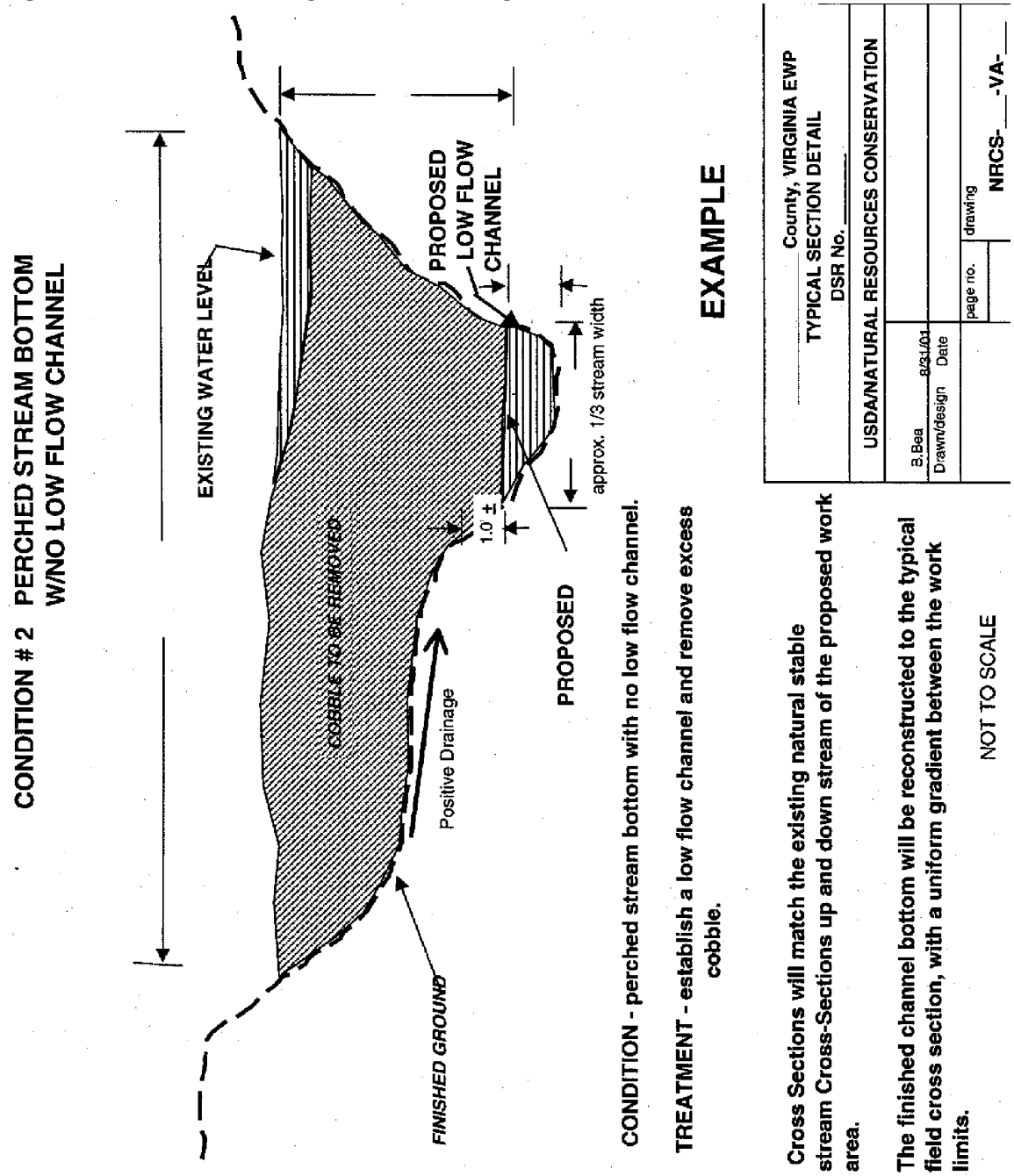


Figure B7. Standard Drawing – Stream Crossing #2.



Appendix C

Memorandums of Understanding

(TO BE DEVELOPED)

Appendix D

Sample News Releases

USDA NRCS Natural Resources Conservation Service

News Release

Date: ***Contact:***

Flood Damages to _____County Still Being Estimated

As the floodwaters recede, damage estimates begin. The USDA Natural Resources Conservation Service is assisting the local officials with damage assessments resulting from the storm which occurred on _____.

There has been an estimated _____acres of cropland flooded in the county. The crop loss as well as livestock loss is being assessed.

There have been _____ streams affected by the high water. Debris and sediment has been washed into these areas causing further hazards to property from bridges and road culverts being severely damaged.

NRCS is working with the local government to identify projects that qualify for assistance under the Emergency Watershed Protection Program or EWP. The EWP program offers assistance to clean debris and sediment from streams, stabilize stream banks, clear debris from bridge abutments, and reseed damaged areas that present imminent danger to life and property from future rains.

NRCS will pay up to 75 percent of the cost. Local governments must sponsor the project and will be responsible to pay the remaining 25 percent. This can be done with cash or in-kind services.

For more information contact your local Natural Resources Conservation Service office. All programs and services of USDA NRCS are offered on a nondiscriminatory basis.

# # #

USDA NRCS Natural Resources Conservation Service

News Release

Date: ***Contact:***

County Receives Emergency Watershed Protection Assistance

The USDA Natural Resources Conservation Service today announced Emergency Watershed Protection projects in _____ County. Work will begin *(insert date)* on the _____ and _____ streams. Local officials have signed agreements to provide the 25 percent cost-share required for these projects. They should be completed by _____.

_____, District Conservationist in _____County said flood damage to streams from the *(insert date)* storm was considerable, leaving debris and sediment that could plug bridge abutments in future rains. The EWP contracts will clear these areas and stabilize stream banks to prevent further damage. He (she) added that USDA is providing the financial and technical help to carry out these projects through the Emergency Watershed Protection (EWP) Program which is administered by NRCS.

There are ___projects scheduled throughout the county. All the projects must be completed within 60 days of the contracts. For more information contact your local NRCS office. All programs and services of the USDA NRCS are offered on a nondiscriminatory basis.

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USDA NRCS Natural Resources Conservation Service

News Release

Date: ***Contact:***

NRCS Assists With Local Flood Disaster

The USDA Natural Resources Conservation Service (NRCS) is working with local governments to assess flood damaged areas. The role of NRCS is to provide assistance to local governments to remove the imminent hazards to life and property caused by flooding and erosion. NRCS administers the Emergency Watershed Protection Program (EWP) which is designed for this very purpose.

There are two types of assistance available through EWP- Exigency and Nonexigency. Exigency provides immediate action when there is a clear threat to life and property. In these extreme cases, NRCS can pay up to 75 percent of the costs for clearing debris from streams and stabilizing stream banks to prevent further damage. Nonexigency is a situation where damage to life and property is high enough for an emergency, but not as immediate. NRCS will also pay 75 percent of the cost for this work.

All projects must be sponsored by a local unit of government which is responsible for the remaining 25 percent cost. This may be cash or in-kind services. Examples of work which can be done under EWP include:

- Debris removal from stream channels, road culverts, bridge abutments
- Reshaping and protecting eroding stream banks
- Repair of damaged drainage facilities
- Repair of levees and dikes
- Reseeding of damaged areas

As these areas are selected for the EWP projects, removal of hazardous conditions will begin. NRCS will assess flood damaged areas to determine if they are eligible for assistance. All applications for assistance must be submitted within 60 days of the disaster.

If there are questions about the program, landowners should contact their local Natural Resources Conservation Service office. Local officials can apply for assistance through their local NRCS office in the form of a letter giving nature, location and scope of the problem.

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Appendix E

Training Plan

(TO BE DEVELOPED)